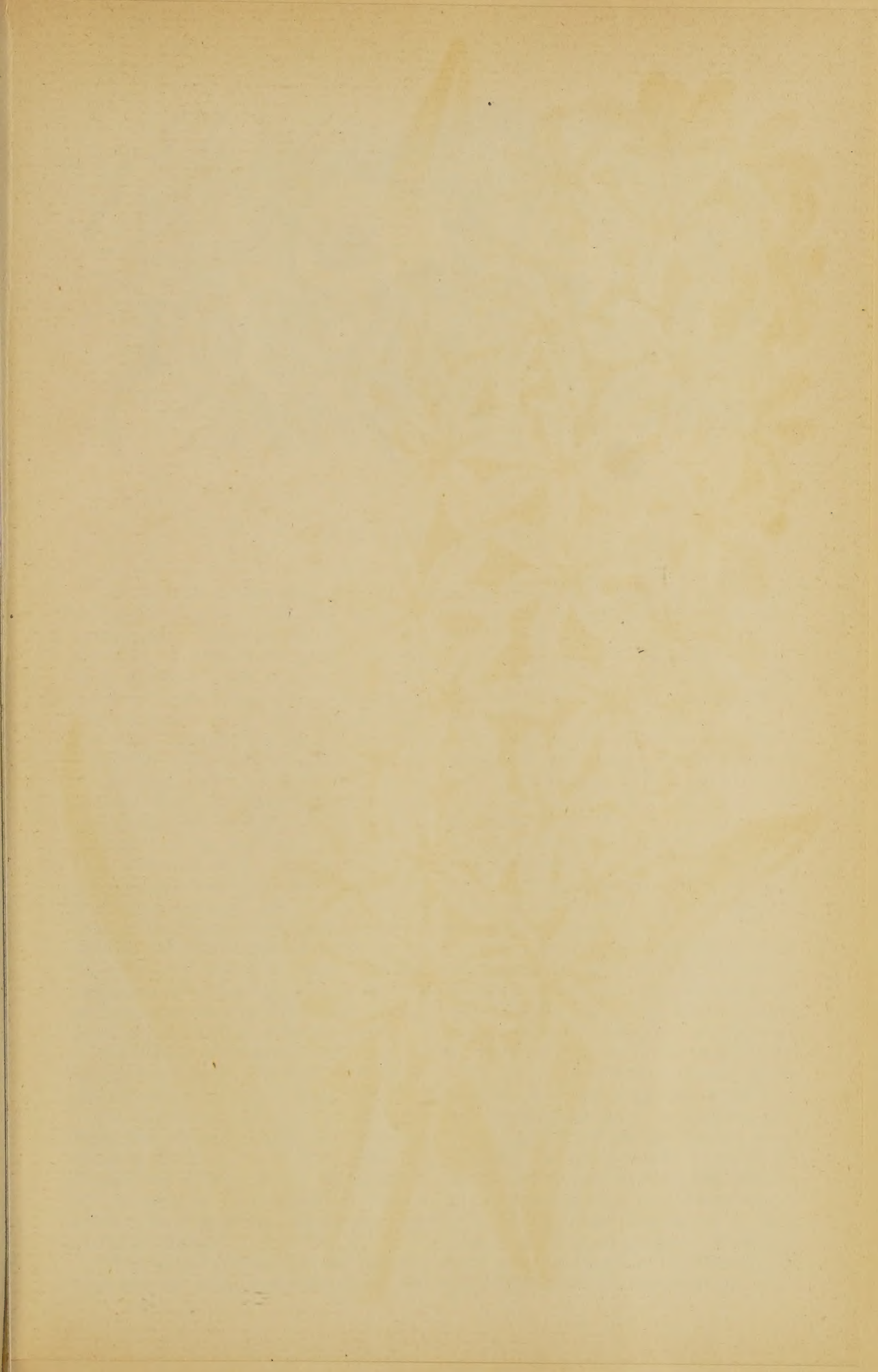


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SINGLE HYACINTHS.





AUGUST, 1886.

THE SUPPLY of home-grown fruit in this region has been plentiful up to the present time. Strawberries, Raspberries, Currants, Gooseberries and Cherries have produced fine crops. The black aphid did some injury to most fruit trees, but a good share of them escaped with but little damage; the Cherry crop was materially reduced by its effects, and the Apple supply will be less abundant on account of it. This insect does its work quickly and our fruit-growers, not having learned how to deal with it, have not been prepared for its coming, and its injurious work has been done almost before its presence was known. The losses have no doubt provoked some good resolutions, and a more careful watch for insects on the arrival of warm weather, and a prompter application of soap-suds and tobacco water, or the kerosene emulsion, will probably be a future result.

The Wilson Strawberry appears to be falling more and more into disfavor on account of its liability to rust.

The summer meeting of the Michigan State Horticultural Society, held at North Lansing, on the 15th of June, gave the Strawberry a large share of attention. Mr. BROWN, a fruit-grower of Benton Harbor, in a note sent to the meeting, stated as follows:

"With us the Wilson has long been the best general purpose market berry, but

being stricken with rust must go. Except in very few localities the Wilson is being condemned on account of blight, and the question of which of the newer varieties is to take the place of the Wilson demands the most serious consideration by our market growers.

"Now when we review the long list of Strawberries which have been introduced with 'great expectations,' not one can be found without serious faults, which will condemn them all to the estimation of the large grower for distant markets; but as a substitute must be found, the berry which produces the most with the least care, and withstands blight and frost the best will be chosen. * * * *

"It is a fact that the Crescent has been substituted for the Wilson in the most of the great Strawberry regions in the South, and with the out-going of the Wilson, and as no better variety has been proved, the Crescent is probably the coming berry.

"It has many faults, however; being pistillate, it cannot long retain popularity with the large grower. It is a great producer, and is soft on the market when fully ripe, but being picked green in the South, and coming to Northern markets during May and early June, it carries very well; better than with us at a later season, when much warmer. If planted here as extensively as the Wilson, the great fault in the Crescent will prove an

over production of poor soft berries. In the South the question is which of the varieties is best for fertilizing. The Crescent appears to be of much importance, the Sharpless being considered best by many growers.

"The Sharpless is becoming the leading market berry at Barnesville, Ohio, and at other points, and I believe we have no better well tried berry for general purposes than the Sharpless, except that it is not adapted to light soils or frosty locations."

A note from PARKER EARLE, the great Strawberry grower, of Cobden, Illinois, contained the following:

"We plant in the spring, and largely of Crescents, setting three rows of them to one of some fertilizing variety, as the Sharpless or Sucker State. We cultivate clean all summer, in matted rows, keeping the rows entirely distinct. We mulch in late autumn with Wheat straw, covering the middles heavily and the rows lightly. Never take it off. Next: The tarnished plant bug ruins ninety per cent. of all varieties, except Crescents, and sometimes half of them."

R. D. GRAHAM said: "I consider the Crescent stands first as a berry for a distant market, as it is of fair size, very bright, enormously productive, and a reasonably good shipper. For a near, or as is commonly called a home market, I like the above for an early berry, but for the main crop there is nothing to my mind better than the Sharpless as a single variety, or the Sharpless grown with some large, finely formed, perfect flowering sort, such as the Cumberland or Manchester, which gives the box of berries a much more finished appearance."

Similar expressions from other members corresponded in the main with the above, and we may therefore conclude that the Crescent will be the variety for some time to come most largely planted by western market growers.

Reports from eastern growers do not show them so well agreed upon any variety, though the Sharpless is evidently a very general market favorite. The Jewell appears to be coming into favor as rapidly as it becomes known.

It is a pleasure to say that Fay's Prolific Currant makes good its claim to the attention of fruit growers. It is quite productive, and as large as the Cherry

Currant, and much better in quality. It is a good grower, and will no doubt long remain the most valuable standard variety of Currant.

The Marlboro Raspberry continues to hold the esteem of the public as a vigorous, productive, early and excellent variety. The *Orange County Farmer*, in its issue of June 24th, acknowledges the receipt of a sample of the fruit on the 18th of that month, which was picked on the same day and sent to them by A. J. CAYWOOD & SON, the originators of the variety; at the same time they stated that the first ripe berries were picked on the 14th of June, and remarked, "we can see no advantage in getting a berry any earlier than this, as it would only enter the market at a time when the Strawberry supply was at its greatest."

A large crop of the Black Cap Raspberry in this State has been somewhat shortened by dry weather.

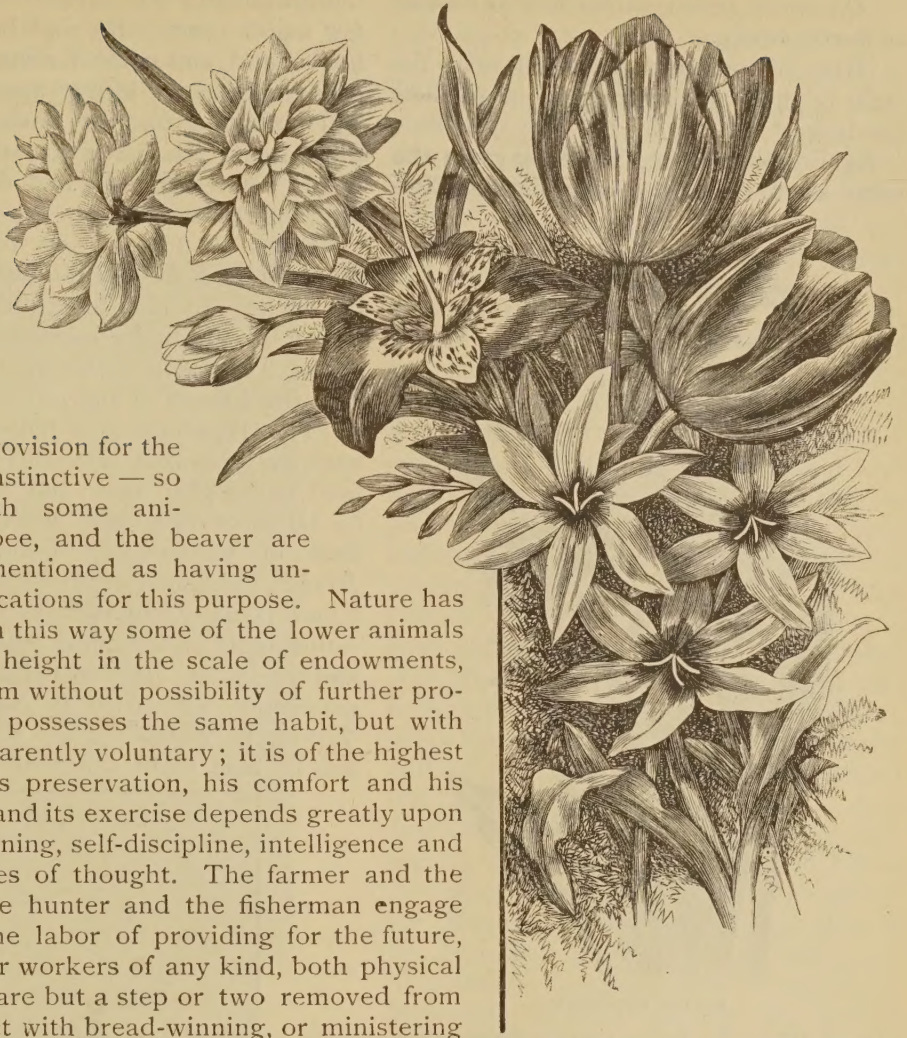
Cherries, in this market, sold from two and a half to four cents a pound, and some neglecting to pick the crop.

The Industry Gooseberry has shown that it is a great bearer and a fine fruit in all respects.

California fruit-growers are in good spirits on account of the prospect of sending entire trains of fruit cars through from San Francisco to Chicago at a rate that will make the charges average about one and a half cents a pound. At this rate, they anticipate, not only driving Florida fruit-growers to the wall, but to seriously compete with northern and eastern fruit. How far their expectations will be realized will be determined soon.

In looking over the whole field it is evident that fruit-growing for market, as a pursuit, is now as greatly extended as it will bear, and that many engaged in it are at most only making a living and holding on, hoping for something better in the near future. Fruit-growing has been pushed to the fore in this country, until now it may be necessary to save it from its friends. The agricultural journals of England took it up three or four years since as a measure of relief for the farming community of that country, and a few months since the *Covent Garden Gazette* announced it as the cure for Ireland's ill in opposition to Mr. GLADSTONE's scheme of home rule. A wonderful pursuit!

SPRING-BLOOMING BULBS.



Making provision for the future is instinctive — so called — with some animals; the bee, and the beaver are frequently mentioned as having unusual qualifications for this purpose. Nature has developed in this way some of the lower animals to a certain height in the scale of endowments, and left them without possibility of further progress. Man possesses the same habit, but with him it is apparently voluntary; it is of the highest value for his preservation, his comfort and his happiness; and its exercise depends greatly upon his early training, self-discipline, intelligence and proper modes of thought. The farmer and the gardener, the hunter and the fisherman engage directly in the labor of providing for the future, and all other workers of any kind, both physical and mental, are but a step or two removed from direct contact with bread-winning, or ministering in some way to human wants and human enjoyments.

The necessity that nature has enjoined upon man to forecast for his bodily wants has, no doubt, been one of the greatest means of educating him for the wonderful accomplishments that he has exhibited through all the ages of our race. The habit of planning, of adapting means to ends, is productive of all the diverse works of man, even as in the fingering of the keys of a wide-ranged musical instrument, by a skillful player, is produced a combination of chords of endless variety.

The gardener's life is one of constant forecasting, far more so than the uninitiated suppose. In spring he is preparing for autumn, in summer and fall for winter and spring. His operations to-day bear a relation to weeks or months hence, that the novice fails to notice.

The spring-blooming bulbs, that but a few short months since were so bright and cheerful after a dreary, ice-bound winter, will very soon demand attention from all who would enjoy them again the coming spring. Through these summer months they have been cultivated and cared for, and will soon need to be placed in their permanent winter quarters for development. It is because we are now so much engaged with vegetation of other kinds that most of us would neglect the spring bulbs until it was too late that we desire to bring them prominently in view at this time.

ALPHONSE KARR says, "We do not know very well what particular bulbs were the gods of the Egyptians. The Lilies, the Hyacinths, the Tulips seem to have more right to these honors than the Garlic and Onions of our kitchens. The Romans, nevertheless, thought that to these belonged the elevated rank.

'*O sanctas gentes, quibus hæc nascuntur in hortis numina.*'

'Holy people, and quite happy at the sight of these gods springing up in their gardens.' "

Again, this pleasing writer says in the same work—*Voyage Autour de Mon Jar-*



ROMAN HYACINTH.

din—"When I admire certain flowers produced by bulbs, and when I think of the things which men in all times and all countries have worshipped and still worship I have not the courage to find the Egyptians very unreasonable in their bulb worship."

Practically, this sentiment is expressed by the people of most modern nations by their devotion to the culinary Onion and its tribe, and to the great variety of flowering bulbs. This class of plants can gratify both the palate and the eye, and holds its adorers by satisfying both. This bulb worship of the old Egyptians has both strength and beauty.

In regard to Hyacinths and their culture, it would be difficult in the same space to find more information and instruction than in the following extracts from a paper read before the London Horticultural Club, in April last, by J. POLMAN MOOY, of Haarlem, Holland:

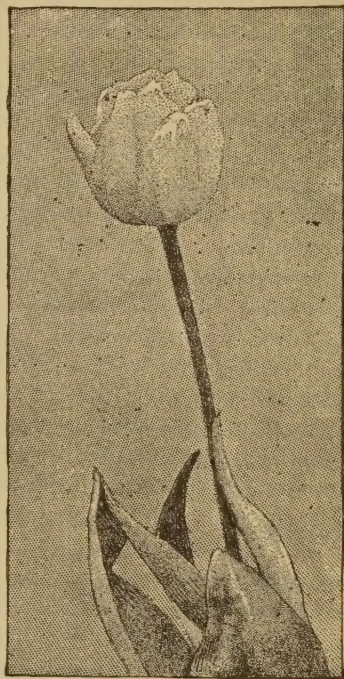
HYACINTHS.

"The Honorary Secretary of our Hor-

ticultural Club has invited me to say a few words upon bulbs and bulb growing in Holland, and while feeling willing and even anxious to oblige the members I will endeavor to meet their wishes, but the subject has been treated upon so much before that I must request their kind indulgence.

"Bulbs or flower roots have for two hundred and fifty years been grown in the vicinity of Haarlem, and their cultivation has gradually increased in importance. The name of this genus originated with the writers of antiquity.

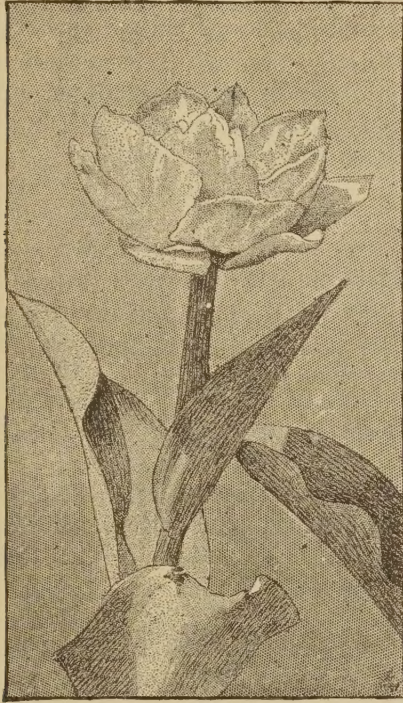
"The Hyacinth is a native of the Levant, and was first introduced into England in the year 1596; but it was known to DIOSCORIDES, who wrote about the time of VESPASIAN. GERARD, in his *Herbal*, published at the close of the sixteenth century, enumerates four varieties—the single and double blue, the purple, and the violet. In that valuable book on gardening, *Paradisus in Sole, Paradisus Terrestris*, published by JOHN PARKINSON in 1629, eight different varieties are



SINGLE EARLY TULIP—POTTEBAKER WHITE.

mentioned and described. He tells us, 'Some are pure white, another is nearly white with a bluish shade, especially at the brims and bottoms of the flowers. Others, again, are of a very faint blush; some are of a deep purple, near violet, others of a purple tending to redness, and some of a paler purple. Some again, are

of a fair blue, others more watchet, and some of a very pale blue. After the flowers are past the stem bears a round black seed, great and shining, from which, after sowing and protecting, the new varieties can be obtained.' During the two hundred and fifty years that have passed since the above was published there has



DOUBLE TULIP—LA CANDEUR.

been a steady improvement in the size, form, and color of the flowers of this plant.

"From the eight varieties of 1629 more than four thousand varieties have been produced, of which, however, the greatest number have become extinct, or out of cultivation. Many have been thrown out to make room for the latest improved sorts, from which about two hundred varieties only are at present subject to extensive commerce.

"The Hyacinth is a general favorite in the most extensive application of the word, and the varieties in color of different shades, from the purest white to the deepest shades of scarlet, purple, black, yellow, and violet, are fully equal to that of any other florists' flower. The Hyacinths are usually grown for forcing into flower in the dull cheerless months of winter and early spring, when their delicately colored flowers and rich fragrance lend a charm not otherwise to be ob-

tained. They are equally desirable for planting in beds, or in the garden border.

"When looking over the cultivation of Hyacinths in Holland, a matter I have studied practically all my life, I must say that very great changes have taken place during that period in the taste and opinions of what a good Hyacinth should be; and, as a matter of course, this change has considerably influenced the varieties which have been propagated and grown. About sixty to seventy years ago there was a taste in general for the double-flowering varieties, and more particularly for the flowers with dark or in other colors striking eyes or centers; and I remember the time that a few beds sold by public auction realized very high prices indeed, while the varieties thus sold at present are not to be found. These double varieties were mostly very small bulb producers, which fact contributed very much to their being neglected and to their loss of favor in public estimation; while the considerable increase of trade and (in consequence of this) the increased competition among nurserymen and seedsmen abroad, stimulated by the feeling of revival in all branches of trade at the fall of Napoleon, our French oppressor, brought on a gradual alteration in the Hyacinth fancy, as every tradesman—excited by the competition of his neighbors—was looking out for the largest sized bulbs among Hyacinths, basing their trade recommendations upon the general but erroneous belief of the general public that naturally the largest bulbs must also produce the largest flower-spikes.

"The small bulb producing varieties, however beautiful they might be, could not at that time find buyers, and growers were then compelled to meet the alteration in public taste as quickly as possible; and as this alteration in taste came rather suddenly and much more quickly than the slow growth and propagation of the desired sorts could keep pace with prices at that time rose wonderfully high.

"In this race after large bulbs among Hyacinths many sorts with very inferior flowers were brought out in quantity; but although these large bulbs did increase the general trade, and so far gratified the tradesmen abroad by a greater sale and more profit, still they did not satisfy the amateurs, and better large

flowers were looked after. After large-sized bulbs with large spikes of flowers became the demand the single-flowering varieties have been found more capable of giving satisfaction than doubles; and when we compare the large spikes of the present day with the sorts we had sixty



POLYANTHUS NARCISSUS—PAPER WHITE.

years ago we can only be well satisfied at the great progress we have been able to make. Although the double-blooming varieties have at present become so neglected, mostly because of their small-sized bulbs, there are some few double sorts which have pretty well maintained their position in public estimation, but their number is small compared with the large number of single ones in cultivation, and their very great beauty will certainly enable them to remain very long as great favorites with lovers of very fine large flower spikes.

SEEDLINGS.

"All the varieties have been obtained from seed selected out of thousands of seedlings and by artificial crossing and

impregnations, which is an occupation of long duration, as a little bulb grown from seed requires six or seven years before it is of sufficient size to produce a good flower; and when considering that this bulb, if found worthy to be grown on, requires twelve to fifteen or twenty years' careful artificial propagation before a moderate stock can be had, it will not create astonishment when many times new varieties have realized large sums of money. New varieties in almost every shade of color have been saved from year to year, showing improvements in size of spike, in size of bulb, &c.; but it may be worth remarking that in all the different colors we have obtained improvement in size of bells with the exception of the bright scarlet colored sorts, which until now have always turned out with small narrow bells. If we could obtain a Hyacinth flower of a bright scarlet color, like Queen of the Hyacinths or Garibaldi, with bells as large as those of La Grandesse or Cloche Magnifique, what a splendid improvement it would be, and probably in the course of time we may obtain the treasure.

"Between the time when double Hyacinths were most esteemed and the time when single varieties came into favor, a period of perhaps ten years, the always increasing demand was greater than the general stock could furnish, and consequently the prices of Hyacinths increased every year, and it was at that time a rather profitable culture. This induced a great number of farmers in the neighborhood of Haarlem to try growing Hyacinths, which many have done with more or less success. At that time land was worth only half the price that it is at present, and the most easy growing Hyacinths were then artificially propagated to such a large extent that the stock overgrew the demand, and during the last three years has forced the market price of such sorts down to such low figures, that during the last two years thousands of Hyacinths have been exported at prices below the actual cost of production, bringing great losses to the growers of this beautiful flower, while it has overstocked the markets in several foreign countries where these bulbs were most used, to which poor circumstances the general depression in trade has of course contributed.

"Respecting the use made of Hyacinths, I may say that the greater portion of the bulbs are forced, and for this purpose the bulbs should be potted about the middle or end of September in five-inch pots in rich light soil, and placed in a cold-frame or under a wall, where they can be covered with wooden shutters, or some similar contrivance, to keep off heavy rains. In either case they should be covered a



POLYANTHUS NARCISSUS—GRAND PRIMO WHITE.

foot thick with newly fallen leaves, and being once well potted after watering they may be left for months to form their roots, when the most forward should be brought out (some repot into somewhat larger pots according to the apparent strength), and the bulbs should be placed in a gentle heat as near the glass and light as possible to prevent the flower-stems rising to an unnatural height. Some care is necessary in the application of this, or the flowers will be abortive. It should not exceed 50° for the first three weeks, but afterwards may be increased gradually to 60°; and if the pots are plunged into bottom-heat the same care should be observed, or the points of the roots will certainly be killed. One-third the depth of the pot is fully sufficient at first, and if the heat is brisk they should not be plunged more than a few inches at any time.

"When the flower stems have risen to

nearly their full height, and the lower bells of the spike are beginning to expand, the plants should be removed to the lower temperature usually afforded by the greenhouse, and when the bells are fairly expanded the plants can be taken to the sitting-room, or wherever their presence is desired, taking care to protect them from sudden changes or cold draughts of air, and the water given to them should be moderately warm.

"Instead of the usual practice of drying Hyacinths at once in the sun I would rather recommend the method adopted in this country—namely, to place them side by side on a sunny spot of ground, and cover them with about an inch of loose earth to thoroughly ripen the bulbs by the subdued heat imparted to the earth which surrounds them. Left in this position for a fortnight they will become dry and firm, and an hour or two's sunshine will finish them properly for storing.

PROPAGATION.

"The multiplication of Hyacinths may artificially be done in two different ways. 1. By the bulbs being cut crosswise and sprinkled with sand to absorb any superfluous moisture that may exude from the incisions. After a time they are planted in the earth in the usual way, when the mother bulb divides itself into small bulbs. 2. By scooping out the base of the large bulbs after they have been taken out in July. After this operation it requires great attention in watching carefully the process of properly drying the wounded bulbs, because by not properly attending to this the whole bulb may become moldy and be lost completely. The bulbs thus treated are planted in October, at which time the small offsets at the base of the bulb are partly visible already, and are then planted in the usual way, only with a slight covering of earth in a warm situation as much exposed to the heat of the sun as possible, where the small bulbs gradually develop in a warm sandy soil, with the proper degree of moisture, aided by the climate, which about Haarlem appears to be so very suitable to the growth and development of this flower. 3. In the most natural way, by offsets from the parent bulb, which is, however, rather a slow process to meet the present large demand."

In behalf of the beginner a few more

explicit directions may be needed in regard to potting Hyacinths. A light soil is best for them, and a good one is prepared by mixing together two parts of turfy loam and one each of sand, leaf-mold and decayed cow dung. This will be both light and rich; it will not always be possible to have a soil exactly of this



POLYANTHUS NARCISSUS—GLORIOSUM SUPERBUM.

character, but a near approach to it, at least, should be attempted.

A five-inch pot is the right size for one bulb—sometimes larger pots are used and three to five bulbs are set in, one at the center and the others about the edge. A bit or two of broken crock at the bottom of the pot for drainage, and then the soil can be filled in within an inch and a half of the top, and the bulb set on and pressed down into the soil and then a little more soil filled in until it comes to the neck of the bulb, but not covering it, and leaving at least a space of half an inch at the top, so that water can be supplied freely when the plant is in full

growth. After potting water should be given through a fine rose so as to settle altogether and not disturb the soil, and the pot is then ready to be placed away in a cool dark place for a few weeks or a couple of months; a cellar is a good place. In such a position the bulb will send out roots, filling all the soil with them. This is necessary before a growth of leaves takes place, as the leaves and the flower-stem develop together, and if the bulb is placed in a warm and light place a stunted growth of the flower-stem and leaves will quickly take place, but not having roots to support them will soon cease to grow, and will thus remain a dwarf, imperfect and worthless specimen. While the pots are in the dark examine them from time to time and supply with a little water, if the soil should become very dry. But much water is not needed, only enough to maintain a moderate moisture. When the soil has become filled with the clean white roots that the bulb will make, and which can be seen by turning the ball out of the pot, the pots can be removed to the light and a little higher temperature, as has already been mentioned. To avoid the necessity of watering after potting and while in the root-forming stage, it is a good plan to cover the pots entirely over with soil or with moist coal ashes, or with leaves, as previously described. A re-statement of this process has been here made because it is so important and because also it is often neglected with resulting disappointment.

To bloom the bulbs in vases of water—Hyacinth glasses—the water should just reach the base of the bulb, and, as before, the bulbs should then be set in a cool dark place until they have sent their roots to the bottom of the vase.

It is well to have a good stock of bulbs, either in water or potted, thus set away, and a few can be brought out at a time at intervals of several days, thus causing a succession of bloom. A few bits of charcoal put in the water of the vases at the time they are set away will have the tendency to keep the water pure. If the water should become impure or discolored it can be turned out and a fresh supply given.

If early blooming is desired, the Roman Hyacinth must be employed, as it can, with proper treatment, be brought

into flower by Christmas. This variety has a loose flower-spike, quite different from the others, but it blooms freely and the flowers are pretty and very fragrant; after the first spike has been cut it is not unusual for the bulb to send up one or two more. It is largely



MUSCARI BOTRYOIDES—GRAPE HYACINTH.

employed by florists. The course to be pursued with it is to pot it and treat it in the manner already described, though it will pass through its course of rooting growth in a shorter time. The bulbs of the Roman Hyacinth are smaller than those of the other varieties, and three or four of them can be put in a six-inch pot.

In planting Hyacinths in the open bed or border have it rich and dug deep. A plenty of old stable manure dug in will show its effects by strong growth and bright colors in spring. Planting can be done any time in the fall while the ground is open, though the earlier the better. Set the bulbs from six to eight inches apart and deep enough to allow a covering of soil four inches thick over the top of the bulbs. If the soil of the bed is

very heavy, it is well to have some light sandy soil, even clear sand, to place below for the bulbs to stand on and to cover them with, so that the roots may have a chance to start out freely, and the leaves to push without restraint. In all northern regions a covering of litter, leaves or evergreen boughs should be placed on the bed before steady freezing weather sets in; this will keep the soil unfrozen, so that the roots will have a chance to grow all winter, thus preparing the bulbs for prompt nourishment as soon as the leaves put forth in spring.

In bedding Hyacinths they are often set in lines or figures of contrasting colors, and in order to produce the best results some care is necessary to procure those that grow to the same height, or nearly so, and that bloom at the same season. A good way is to plant masses of contrasting colors.

If the space that Hyacinths occupy should be needed for other flowering plants, let them stand as long as possible after blooming and then lift them carefully with a spade, with soil attached, and stand them in some dry spot, and spread a few inches more of soil over them and let them remain there until ripe, when they can be put away in paper bags, or in boxes, in a dry place until the time arrives in the early autumn when they can be again planted.

Bulbs that have bloomed in water are of little or no value for future use, but they can be preserved, if desired, by removing them from the glasses and placing them in soil without mutilating the roots.

TULIPS.

The Tulip is next, if not equal, to the Hyacinth in commercial importance. Though not so valuable for forcing, it is more showy than the Hyacinth in the open border; still, it is much used for forcing, and the general treatment described for forcing the Hyacinth is applicable to this bulb.

The principal garden classes of Tulips are the Duc Van Thol, the Tournesol, the Single Early, the Double, the Parrot, and the Late or Show Tulips; the latter are subdivided into Bizarres and Bybloemens, and the latter into Violets and Roses. The Duc Van Thol and the Tournesol varieties are quite low-growing plants compared with those of the

other classes. The Tournesols are double flowers in two varieties. The Duc Van Thol, Tournesol, Single Early and a few varieties of the Double are those used for potting; the Single Early, perhaps, being most employed. The London market is supplied with them in bloom in pots in great quantities, one flower-grower alone sending more than a hundred and fifty thousand of them a year.

The method of raising them there is one we have not seen practiced in this

enriched, and plant the bulbs from four to six inches apart and three inches deep.

Both the Single and the Double Tulips can be employed for bedding in figures, or in masses of single colors. A large star-shaped bed of La Candeur, seen from our office window, this spring, remained in fine condition several weeks—a white star on the green lawn.

The large, well formed and bright, often dazzling, flowers of the Tulip will never fail to find admirers, even as some one has personified it with the following language:

"The florist admires my elegant robe,
And praises its rainbow ray,
Till it seems as if, through his raptured eyes,
He was gazing his soul away."

NARCISSUS.

The fabulous story of Narcissus, as related by OVID, is that he was the son of Cephissus, one of the Grecian river gods, and the nymph Liriope. He was uncommonly beautiful and fell so violently in love with himself on beholding his image in a fountain, that he wasted away with desire, until he was changed into the flower of the same name. He was beloved by the nymph Echo. In various ways this story has been wrought in verse; this is by GAY:

"Here young Narcissus o'er the fountain stood,
And viewed his image in the crystal flood;
The crystal flood reflects his lovely charms,
And the pleased image strives to meet his arms.
No nymph, his inexperienced breast subdued,
Echo, in vain, the flying boy pursued.
Himself alone, the foolish youth admires,
And with fond look the smiling shade desires;
O'er the smooth lake with fruitless tears he grieves;
His spreading fingers shoot in verdant leaves;
Through his pale veins green sap now gently flows,
And in a short-lived flower his beauty blows."

The Narcissus is one of the most popular of bulbs for forcing. Large quantities of it are raised for florists' use. The varieties most in demand for this purpose are the Paper White and the Double Roman Narcissus; the Jonquils are, also, largely used in this way. Amateurs will find all of the varieties of Polyanthus Narcissus exceedingly interesting and easily raised as pot plants. The pure colors and the fragrance of these flowers are highly attractive and pleasing. The varieties of the Single and Double Narcissus are quite hardy, but the Polyanthus varieties are tender in this region in the open ground, and require to be well



COLCHICUM—HALF SIZE.

country; there, it is said, "market gardeners insert their Tulip bulbs very thickly in boxes or pots, and therein grow them until they are nicely bloomed, when they turn them out of the pots or boxes, and pot them afresh, placing from four to five bulbs in each pot. The Tulips being thus transferred with as good roots as possible, and otherwise treated kindly, soon make abundance of fresh roots, and do not suffer in the least from the shift."

With us it is customary to raise Tulips in pots, putting three or four bulbs in a five-inch pot, setting them two inches or more below the surface. After potting, water and set them away to root, as directed for Hyacinths, bringing them out, after rooting, all together, or a few at a time, as may be desired.

In bedding Tulips, have the soil well

protected when planted out. They should be set in the open border in the same manner as Tulip bulbs.

In potting them, place one bulb in a five or six-inch pot, and keep the neck of the bulb even with the surface of the soil, and otherwise treat the same as Hyacinths. Narcissus bulbs can also be bloomed in water.

the lawn early in the season. Both the Crocus and the Snowdrop can be raised and bloomed in the house by potting them about an inch apart and keeping them in a cool, dark place to make roots, and afterwards giving them light and a little higher temperature—but there is little danger of keeping them too cool in greenhouse or window treatment.



CROCUS—NATURAL SIZE.

CROCUS.

The Crocus is a most interesting, low-growing, spring-blooming plant, coming into flower much earlier than any of the bulbs already mentioned. It forms handsome borders planted along the edges of walks or beds. It is a hardy alpine plant and can maintain itself pretty well even in our climate. Few other garden plants show signs of awaking from the winter's slumber when this comes into bloom. Only the Snowdrop is earlier. These plants should be in every garden, as the sight of them in spring is most pleasing.

They should be set about two inches deep and three inches apart in the garden border. And one of the best uses that is made of them and Snowdrops, which are treated alike, is to set them promiscuously about in the lawn in the fall; here they bloom as soon as the snow is gone and nearly ripen before it is necessary to mow. The different colored varieties of the Crocus should be used, and they give an unexpected life to

the lawn. It is an interesting plant and worthy of a place in the garden, and by preference should be set on the borders of shrubberies in well-drained, light and rich soil. It is excellent, too, on rock-work.

Another species, *C. Agrippina*, has deeper colored flowers and with different markings.

IXIA.

The Ixia is a half-hardy bulb in this climate, though at the South it can be planted out. It is, however, not difficult to raise in the house, and the flowers are very beautiful.

The bulbs should be potted as early as possible in the autumn, putting five or six bulbs in a five-inch pot. Use a soil such as could be formed with one part of sand, one of leaf-mold, and one of old hot-bed manure all mixed together—a light, rich, sandy soil. After potting set the pots away in a dark, cool place for a few weeks, or until the bulbs begin to push, when they can be removed to a light place in the greenhouse or the win-

Although these bulbs are quite hardy, yet when planted in the open ground they should have some litter or leaves spread over them before winter to save them from being thrown out by thawing and freezing. When set in the lawn no covering is needed.

COLCHICUM.

Colchicum autumnale is called the Autumn Crocus on account of its blooming in the fall. The flowers are a delicate pink, and quite

dow, but not given much heat. The leaves will continue to grow for the next three months, and then the slender flower stems will appear, and in time will need support. Only enough water is to be



SNOWDROP—REDUCED SIZE.

given all through their growth to maintain a light moisture in the soil. The blooming season will last for about a month. The flowers are of many colors, and about two inches in diameter.

CROWN IMPERIAL.

Another bulb of early spring specially worthy of notice is the Crown Imperial, *Fritillaria imperialis*. It is perfectly hardy and survives our coldest winters. Almost as soon as the frost is out of the ground it begins to push up its strong stems along which its leaves are borne, and which support at the summit an umbel of drooping flowers of different shades of red and orange, and one variety is yellow, and another has leaves with yellow stripes. The bulbs should be planted four or five inches deep in good soil in the border.

GRAPE HYACINTH.

The so-called Grape Hyacinth, *Muscari botryoides*, an interesting plant, bearing spikes of little, nodding, blue and white flowers, and blooming in mid-spring. It is quite hardy, and once having been planted it can be left to itself, and it will thrive and rapidly increase. In some places this plant has escaped from cultivation and established itself in the fields and other uncultivated places. One of our correspondents, last year, related the accidental observation of such a wild growth, in Livingston County, in this State, describing it as a "remarkable patch of color in a low meadow, some distance in advance. It appeared most like a dark blue reflection from rippled water. Passing it at a distance of some rods, I concluded it must be flowers, but could not imagine what sort had so suddenly sprung up. On my return I alighted and went to the spot, and found several acres thickly covered with a flourishing growth of Blue Grape Hyacinths, much taller and with larger blossoms than are usually seen in gardens. Bees were humming about, and children were rolling among them. I gathered until my hands could hold no more. Inquiring at the farm house nearest, I was informed that one or two little plants were observed in that meadow two years before, and from them, apparently, all this array had sprung." Such is the hardy and prolific character of this plant.

One species of *Muscari*, *M. moschatum*, is musk-scented, and it is from this quality the genus is named, the word being derived from *moschos*, musk. *M. racemosum* and *M. comosum* are also cultivated.

These as well as the other bulbs that have now been noticed require to be set in the fall, and the earlier the better, though they can be kept dormant so as to be planted quite late, if necessary



CORRESPONDENCE.

ROSES OR RUE.

A maiden walked in a garden fair,
Where lovely flowers perfumed the air,
Where fountains plashed and the shadows sweet,
Played o'er the grasses around her feet ;
Where toiling bees hummed their busy song,
And blithe birds caroled the whole day long.

No Rue that bloomed on the garden wall,
No fragrant Lily erect and tall,
No bright Carnation or Fuchsia bell,
No Wallflower, Orchid or Asphodel,
Could win the maiden's admiring glance ;
She passed them all with a look askance.

The blushing Peach and the low-hung Pear,
The luscious Grapes in abundance there,
Enticed her not—Plum and Nectarine
Might tempt in vain with their velvet sheen,

For from that garden so bright to view
She gathered only—a sprig of Rue.

In life's fair gardens rare pleasures lie,
And will you pass them neglected by ?
Gather no bloom from life's summer bowers,
To fill with fragrance the winter hours ?
Pleasure or pain may be plucked by you ;
Will you leave the Roses to cull the Rue ?

Who passes the blossoms of kindness by,
And leaves Love's Lilies to droop and die ;
Who gives no heed to Affection's flowers,
Plucks no ripe fruit from life's well-hung bowers,
Of Trust or Sympathy, tried and true,
Has left life's Roses to cull its Rue.

DART FAIRTHORNE.

TREE AND SHRUB SPORTS.

Horticulture owes much to the freaks of nature. When a plant, or any part of one varies from its normal form without apparent cause, such as might be exerted by hybridizing or selection of seeds, it is said to sport. We owe many of our most interesting garden forms to this peculiarity, in fact, nearly all weeping and fastigate trees, all golden, purple, variegated and cut-leaved foliage trees and shrubs are sports. Many of these peculiar forms show themselves first in the seedlings, others are the result of a single branch varying in a more or less marked degree. Now and then a peculiar form can be explained, as the Heath-leaved and Tom Thumb Arbor Vitæ ; these varieties have sharp, spreading leaves instead of the blunt and close leaves of the type. All Arbor Vitæ seedlings in an early stage of growth have the sharp, spreading leaves of these forms, and they are evidently a perpetuation of this character.

Sport variations are far more common than is generally supposed ; many times there is only a slight variation from the original type, and again it is more marked. Not only do the trees and shrubs vary, but the weeds of the garden and roadside frequently show variegated or peculiar forms. Some species have more of a tendency to vary than others. All have

noticed the great variety in the forms of the American Elm, or the Red Cedar, but the White Pine or American Linden vary little in character, yet a distinctly weeping form and a very dense and round-topped form of the White Pine have been found growing wild.

It may be demonstrated that those varieties which vary least in general outline are the ones that vary most decidedly when variation takes place.

These plant variations would be a very interesting study and very important, for if a cause for these distinct forms and colorings could be found, and were it possible to so influence the growth and colorings of plants as to produce distinct varieties with any degree of certainty, a wonderful advance would be made in horticulture.

We have received from Japan and China some very remarkable and distinct sport forms. The *Retinospora* named in variety in the leading nurserymen's catalogues, are evidently all forms of one tree, like, or nearly related to, our White Cedar, *Cupressus thyoides*. There is a wonderful variety in the different forms, both in habit and color of foliage, some are dwarf and compact, others loose and graceful, with slender, drooping or fine sprays of branches ; others have close, compact leaves in dense tufts

or sharp and loose leaves in delicate sprays. The plants vary in color from a deep, rich green to lighter shades of the same color. Other varieties have white-tipped branches, or are of a very bright yellow shade, and still others have a most charming bluish tinge. These varieties are nearly all hardy, and as they are of dwarf habit they are of the greatest value in the ornamentation of small grounds.

The Japan Maples, varieties of *Acer polymorphum*, are also very distinct and beautiful, but unfortunately they are not all hardy enough for general cultivation.

There are many unique varieties of trees and shrubs that are of European origin, as the Purple Beech, Birch, Hazel, Barberry, Golden Elder, Poplar, Oak, and variegated Cornel, Weigela and Maple, the Weeping Beech, Fir, Birch and Elm. Many of them have been in cultivation for many years, and are of the greatest value in ornamental planting.

We have varieties originated in America that we can be truly proud of. Weeping forms of the Norway Spruce, and Hemlock, and *Cornus florida*, Golden Juniper, Parsons Dwarf or compacta *Arbor Vitæ*, Woodward and Little Gem, and

many other *Arbor Vitæ*s, similar in character, Cut-leaved Maple, Variegated Tulip Tree and many others of equal value.

When one is looking for these sport variations there is seldom a season passes without some new form presenting itself to the view, but it is one thing to find a sport form and quite another to propagate it. It may be weaker growing than the type, it may be a small branch, and proper stocks to bud or graft on cannot be obtained, and many other difficulties present themselves to the experienced propagator. Probably many valuable varieties are lost simply because the finder knows no way of perpetuating them.

There are very few propagators that have a sufficient knowledge of trees and shrubs, and the necessary skill to propagate all new forms. Mr. JACKSON DAWSON, at the Arnold Arboretum, Jamaica Plains, Mass., has remarkable ability in growing hard-wooded evergreen and deciduous trees and shrubs, and those finding peculiar variations would receive the necessary information as to propagating by communicating with him.

WARREN H. MANNING.

JEFFERSON COUNTY, COLORADO.

Farms well cultivated, rich with old, well built dwellings shaded by luxuriant fruit trees and surrounded by beautiful gardens, are not among the sights of Colorado generally described by tourists, nevertheless they exist. More than twenty-five years ago the valley of Clear Creek was settled by the first Colorado people, who tried the dubious experiment of tilling what was called the desert. Jefferson County lies next to Arapahoe, the seat of which is Denver, a long strip of land more than sixty miles in length and twenty in breadth. Within its limits are coal, gold and copper mines, limestone and sandstone quarries, and a variety of surface which permits the growth of a large and interesting wild flora. Its towns are Golden, the County seat, Morrison, where I am at present, and Mt. Vernon, once the capital of the provisional government, and now little more than a name. There are a few post offices scattered through it, but the places that can claim town privileges are only two, Morrison and Golden. Golden

was, until 1868, the capital of the Territory, and is now a quiet and pretty city of between three and four thousand inhabitants. It is from Golden to Denver that the so-called garden of Colorado reaches along the muddy water of Clear Creek. Never, by the way, was a name more ill-bestowed. Rising far among the mountains of silver and gold, its current is polluted long before it reaches the valley. The first of Colorado railroads was built along this stream, the Clear Creek cañon being then looked upon as a marvel of engineering skill. Since then the wonderful achievements of the Rio Grande have almost completely eclipsed the efforts of the Colorado Central.

The scenery in the County is not of the magnificent order, but is full of change and beauty. Mountains, alternately bare and Pine clad, rise in some parts above timber line, though never to the snow limit. Lakes, including the famous Soda Lake, occur at frequent distances on the plains, and in the valleys are numerous springs. Bear Creek, which rises in the

Snowy range, near Georgetown, winds down a cañon which is one of the favorite summer resorts of tired and dusty Denver. Where the creek leaves the mountains for the plain stands the little village of Morrison. It does not contain more than a thousand inhabitants, but as I have seen it when three ranches comprised the whole civilization of the valley, I may be pardoned for alluding to it at some length. North of it, at the foot of Mount Morrison from which a wide view is obtainable, are the group of Red Rocks, which some party tried to christen the "Garden of Angels." The title does not appear to have been generally adopted, but the huge masses of stone really rival in fantastic shapes, caverns, and extent the celebrated Garden of the Gods, at Colorado Springs. To the south again, some five miles, are the Bradford Red Rocks, columns and castles of the same singular interest. Within half a mile of the town are Soda Lakes, or rather ponds, deep blue in the midst of the arid plain,

Through Morrison, in the early days of Leadville, creaked the heavy trains of the freights bound for Leadville, Fairplay and all the mining camps along the range. Here, where now stands the stone edifice of the Jesuit College, where the students render the music of WAGNER and the plays of MOLIÈRE, all the bands of the Ute Nation were encamped not more than ten years ago. Morrison being but sixteen miles from Denver, was a convenient spot for the Indians to wait

and pasture their ponies near the city, where the question of supplies called them once a year from the green parks across the range.

Since I have seen western Colorado, I confess to a comprehension of the intense regret with which the Indians must have left forever that land of snowy peaks and rushing waters. But I am not a lover of the dark races, and after all I know of the frontier, can hardly mourn for them. Past our ranch they rode in large force, one day, for the last time, the day after poor McLEAN was killed at Cheyenne Wells. Then came the troubles at the agency, the outbreak and the final removal of the whole tribe from the State. "H. H." lavished all the sympathy of her gentle and generous nature in a vain attempt to stem the wrath which dictated their expulsion, but the death-stricken faces of the white captives who were rescued, out-weighed in a day all her genius and her eloquence. Her rare and gifted nature has found peace at last under the Pines that she loved, and all mortal strife is doubtless clear to her now.

But I did not calculate upon an essay on Indian politics, only a slight and faithful sketch of the County with whose roads and trails I have been familiar for years. I have digressed sadly from my subject, yet I hope the reader may form some idea of a home-like Colorado region which the writer of western sensations is not tempted to visit.

MARION MUIR.

GRAPE-GROWING AND RAISIN-CURING IN CALIFORNIA.

Grape growing, drying and curing for Raisins is now an established industry in Southern California; every year the area devoted to it is very much increased, so that in a few years we expect to supply most all that is needed by the eastern and western cities and markets. The United States' consumption of Raisins, at present, is placed at 6,000,000 boxes, or 120,000,000 pounds. The yield of Southern California, in 1885, was about 475,000 boxes, or 9,500,000 pounds, and more than a quarter of these were grown and cured in the San Bernardino Valley. The ubiquitous croaker is already beginning to croak of over-stocked markets and low prices, but as "good wine needs no

bush," so good Raisins will not look long for a market, and, as after all, the area is very limited where they can be grown and cured, Raisin growers have nothing to fear in the future.

The Grapes grown for Raisin curing are the Morocco, Muscat of Alexandria and the Sultana. The Muscat being greatly in excess of the others, and in my estimation much superior.

The different theories as to the best methods of growing, pruning, irrigating, curing, grading and packing are indeed legion, scarcely any two agreeing, and if a beginner starts out to gain information from the surrounding vineyardists, before he gets round home again he knows less

than when he started. One advocates planting nine feet between the rows and four feet in the rows; another will plant eight by ten feet, and another nine by nine feet, and so on. When one will say leave the stem nine inches to one foot in length, another one foot to two feet, still another will say, "don't leave more than two, three or four inches." One will leave two or three spurs and prune to one or two eyes; another will leave eight to twelve spurs and prune to three or four eyes, and one will sucker and summer prune two or three times, and another will say, "let them alone." One will give them as much water as he can get hold of, and another will wait till the vines begin to suffer before irrigating, and so on, all through the different processes of growing and curing. Not one of them seems to have any good practical data, based on careful study and observation; each has his own ideas, and the mistakes are not only laughable, but very expensive.

The cuttings are what we call spur shoots, no lateral shoots being used, and they are put in about fifteen inches long, being put in a furrow about two to three inches apart and a furrow plowed on to them. They are generally kept in nursery two years, and sold from five to fifteen dollars per thousand, according to quality and supply and demand.

The most generally received distances in this district for planting in vineyard is nine by nine feet and ten by ten feet, as they are much more easily cultivated and irrigated when planted square. The planting is generally done in February and March, although I believe it would be better to plant directly after the fall rains, as the plants would get much better hold of the ground before the hot weather begins.

Pruning is done in February, March, and even April, some leaving this operation until after the vines start.

They are generally irrigated once a month; but the vineyardist has to be ruled by his land, as some soils take up much more water than others, and some are very much more retentive.

The Muscat begins to ripen about the first of September, and as soon as they are ripe they are cut off and laid upon thin wooden trays about two to three and a half feet in length, and twenty to

twenty-five pounds to the tray, and laid slightly sloping to the sun. In from ten to twelve days they are ready for turning, which operation is performed by two men placing an empty tray on the Grapes and by a dexterous turn of the arm the under tray comes uppermost, and the Grapes are turned. The second drying does not take so long as the first, and it is very essential that the vineyardist knows just when to transfer the Raisins to the sweat-box, because if they are put in bulk too soon they will rot, and if they are too dry the Raisins will be broken off the stems and be spoiled for first grade Raisins. The sweat-boxes are about three to four feet in length, and six or eight inches deep, and hold from one hundred to two hundred pounds of Raisins. The Raisins are left in these boxes one, two or three weeks and undergo a sweat. The whole of the mass becomes equally moist by the dry ones taking moisture from those more moist; the stems become tough and pliable, so that they will not break in packing.

To pack Raisins one must have a press and two or three forms with movable bottoms, each form when packed will hold about five pounds of Raisins; it is then placed in the press for a minute and then held over the box ready to receive it, the bottom is pulled out and the cake of Raisins drops into its place. There are four of these layers to a box which contains twenty pounds of Raisins. When the Raisins have gone through a sweat and are ready for packing, they are turned out on a large table with sides, and graded. The finest are packed as London Layers, the next as Layers, the next as Best Muscatelles, and the next as second grade Loose Muscatelles. The packing of the two first grades is quite an art, and it is a very good packer indeed who packs from fifteen to eighteen boxes of Layers a day. The Loose Muscatelles are run through a stemming machine, and then through a winnowing, and then only a top layer is pressed, which is sometimes faced in various designs with larger Grapes.

It takes one ton of Grapes to make about thirty boxes of good Raisins, and vines in this district, three, four and five years old, will yield ten, fifteen and twenty pounds, respectively, to the vine; this is the average of a fairly good vineyard.

Vines here generally bear some second crop, but if they are summer-pruned this crop will be largely to the detriment of the first crop. I saw a vineyard, last year, where the second crop was much larger than the first, and neither was of first quality, and I found they had summer-pruned twice, and the second crop forming on the lateral shoots had taken a great deal of food from the first crop. This second crop ripens from the first of October to the first of November, and, as the weather becomes unsettled and the sun loses power, the cost of drying and

curing is somewhere about three times as much, and this is not all; the bunches being small none of them will do for London Layers, and very few of them for second grade Layers, and so all this extra expense is incurred for Loose Musteltes.

I am now conducting an experiment to do away with the second crop, and if I succeed, I expect to have a much finer grade of first crop, and do away with the great trouble and expense of handling the second crop.

W. H. WADDINGTON.

THE SWORD FERN.

The Sword Fern, *Nephrolepis exaltata*, is a very distinct and desirable species, and well deserves a place in every collection of greenhouse plants. It is also an excellent plant for the window garden.

It is an evergreen warm greenhouse plant, and is a native of tropical America. The fronds grow from one to three feet in length, and are of a light green color. On their first appearance one would think that they would be very small, but they gradually unroll from the top until they attain their full length. B. S. WILLIAMS, in his *Select Ferns and Lycopods*, in describing this species, says: "In this plant the pinnæ are articulated to the rachis, that is, they are not fastened to the mid-rib of the frond, but are set into little joints; this may seem of small consequence, but is, nevertheless, a good distinguishing character, for if the plants are neglected in watering they soon prove that it is of further consequence, for should they, through accident or carelessness, be allowed to remain dry at their roots for a day or so, all the pinnæ will fall off at the joint, leaving nothing behind but the bare stick-like mid-rib."

This *Nephrolepis* is a plant that can be easily cultivated. It requires a compost

consisting of two-thirds turfy loam and one-third well decayed manure or leaf-mold well mixed. Good drainage is also essential, for although the *Nephrolepis* requires plenty of water, yet it dislikes to have stagnant water around or near its roots. In potting use pots proportionate to the size of the plants. If large specimens are desired, the young plants should be repotted as often as necessary until they reach the desired size. The plant grows most rapidly during the summer season, when it should be given as warm and moist a situation as one has at command. In the winter an average temperature of from 50° to 55° will prove sufficient, and water must be given whenever necessary.

Propagation is readily effected by a careful division of the plant during the months of May or June, and the long wiry rope-like growing rhizome, which is another peculiar feature of this plant, furnishes another means by which the plant can be readily increased.

The generic name is derived from *nephros*, a kidney, and *lepis*, a scale, referring to the covering of the seed or spore cases.

CHAS. E. PARNELL, *Queens, N. Y.*

HONEYSUCKLES.

The Honeysuckle is one of our best strong-growing vines for use about verandas or for training on trellises on the lawn. Its bright, healthy foliage is very pleasing without any flowers to display themselves against its effective background, and when they put in an appearance, the plant becomes really "a thing

of beauty," which, if not "a joy forever," is certainly a joy as long as it keeps on blooming, which is generally through the entire season. Though not as profuse a bloomer as some plants, it is much more constant in its supply of flowers than almost any other shrub we cultivate, and this fact should make it more popular



than it is among those who like to have flowers from June to the coming of cold weather.

Another valuable feature about the Honeysuckle is its hardiness. It will stand a pretty severe winter without protection, but I would always advise cutting the plants loose from their trellis, or whatever support is given them, and laying them down on the ground in November. Give them a covering of evergreen branches, if convenient; if these are not to be had, spread

coarse litter over them. There are many very fine varieties, but the most desirable I will name and describe below:

Halliana; a variety brought to this country from Japan, by Dr. HALL. This has dark rich foliage, which is in fine contrast with the flowers, which are pure white on first opening. Later they take on a creamy tinge which is very pleasing. They are exceedingly fragrant, and therefore very useful for bouquets. Nothing is finer for large vases than branches of the Honeysuckle in full bloom. The branches should be cut long enough to allow them to droop over the vase in very much the same manner that they disport themselves on their trellises. A stiff arrangement, which is sure to result if they are cut with too short stems, spoils their effect. Just drop the end of the branch into the vase, and allow them to arrange themselves. They are never otherwise than graceful when left to themselves. The variety spoken of above blooms all the season. It is a rapid

grower, and is the best of all varieties for covering large trellises, or training about the eaves of the porch or veranda.

Belgian; this is more generally called the Monthly Fragrant. It is, like Halliana, a constant bloomer, but in color it differs greatly, the buds being a shade of red on the outside. The inside of the flower is white, which changes to yellow, thus giving a cluster in which the blooms develop in succession, a variegated appearance. Like the other, it is very sweet. It is not as rampant a grower as Halliana, and can be made into quite a shrub by a judicious system of cutting back to make it compact and bushy.

Aurea reticulata; this is a Japanese variety, and is more valuable on account of its foliage than its flowers. The leaves are distinctly marked with bright yellow, which contrasts well with the green in them. The flowers are a pale yellow, and not particularly noticeable among the yellow variegation of the foliage.

Sempervirens; or more popularly, Scarlet Trumpet, is an American variety, and can be found growing luxuriantly in many sections of the country. The long, tubular flowers, of a bright scarlet, lined with yellow, are borne in clusters. They are succeeded by scarlet berries which would be very ornamental if the birds would let them alone, but the robin lays special claim to them as soon as they ripen. This variety is iron-clad and needs no protection. Here, at the west, we often find it climbing to a height of twenty or or thirty feet, covered, during the latter part of summer, with its brilliant clusters. I have seen it planted with Halliana and trained on the same trellis. The scarlet and white flowers contrast charmingly with each other. We have a pale yellow variety growing here, which is very much like the above in all respects but color. It is not much cultivated, however, because it is not a profuse bloomer.

EBEN E. REXFORD.

A GARDEN GOSSIP.

It is sweet to leave town, the dirty streets and depressing odors, and come out where breezes flow freshly on the wearied frame, and sail on the train into an atmosphere of vernal grass, Clover blossoms and such flower fragrance. It is an ever new delight, coming home to the blessed boughs, the wealth of purple and white Lilacs, and the delicate vintage of the deep Wistaria clusters over the trellis by the library door. We sit between the charms of May and October in the early summer evenings, with bloom and fragrance blowing all about the house, and the cheer of dancing fire on the hearth within. This exquisite blending of delights is one of nature's choice preparing, and it comes alike to the lonely cabins on the prairie and fine houses in their aced parks. This lovely prodigal spring offers many such hours between flowers and fires, these fragrant, frosty nights.

Plans laid in winter begin to disclose their charms. Every nook and corner of the place not in turf is to be filled with Mignonette, Heliotrope, Sweet Alyssum, and such fragrant honey-breeding plants for bees to pasture in this small domain. While some ambitious girl is waiting a chance for a livelihood, why does she

not keep bees through the summer, and have a few dollars to start with in the fall? It is quite as lady-like as music teaching or art decoration, and can be learned as easily, I suppose. I was told, as beginners usually are, no matter what the position, that bees would not do well here; the reason in this case being that so near the coast the high winds blew them away, and again, there were not flowers enough for them, and they were uncertain, any how. I don't know any pursuit in the world that has not risks and failures, and that does not need close watching and skill. I have given up expecting easy successes. As for that, not a project has been proposed on the place this spring that has not been kindly pronounced impossible by local authorities, and there has not been one undertaken that has not turned out well. For one thing, it was late for the garden, and nothing could be done this year without loads of manure and no end of expense. The idea of hauling manure eight miles at five dollars a load did not suit my book, and by judicious care of resources on the place, scraping the soil out of an old barnyard, raking up litter, forking over old sod heaps, and composting with old plaster, waste lime, wood ashes

leached ashes and coal ashes mixed sifted closely, and soaking with house slops and the drainage of the stable yard, wheeling droppings from the places where carriages stand, and turning under all garbage from the kitchen, there has been enough for all uses so far, and to spare.

It was not convenient to dress the lawn newly, so we sifted the winter ashes liberally over it before the frost was all out of the ground, and you can trace it by the growth of Clover. Stable manure was too valuable to spend on flowers or trees, for which the earth closet was drawn upon liberally, and it does not need Chinese encyclopedias to teach one its virtues for shade trees and garden borders, which never showed more brilliant bloom. Less than ten dollars have been spent in fertilizers of all kinds, besides what was composted from house and garden wastes on this place, which keeps not so much as a hen or pig in animal shape. The old Strawberry beds are to be plowed under, and do as much good in restoring the soil as a crop of Clover. A peppering of Bowker and bone dust with lime and ashes, and the cess-pool pumped where it is needed, will turn out all the fruit and flowers we can take care of.

Seven dollars a cord for strawy stable stuff, delivered, is too much for common people to pay in quantity. Not a polite subject, you seem to say, which reminds me how it offends the ears of village ladies when, in garden discourse, my speech, guarded for their sakes on this very point, is betrayed into plainly wording it "manure." Without dilating on the subject, as CANON HOLE does fearlessly in his *Book on the Rose*, why should women, more nice than refined, withdraw in shocked dignity from the mention of an indispensable garden subject, or old farmers tread gingerly in speech around the forbidden word in general conversation, as if it were unfit for female ears. The world is better taught than to tolerate such prudery, and if mincing townsman considers manure too coarse for utterance, let him know the coarseness is in himself, and repent of his folly. Gardening refines all that is common and unsavory. If its wastes are treated right, there will not be a smell about the homestead from year's end to year's end that is not fragrance. Nothing

unpleasant should be left twenty-four hours without purifying by earth or fire. Often in digging the flower beds I have wondered at the fragrance of the soil where a Rose Geranium or Lavender has been turned under and scented its grave over winter. Whatever disagreeables have to be skirted the gardener sees in them the glory of summer blossoming. There is no excuse for raising stench in good gardening. Literally, in every task we may "smell the Rose above the mold."

My neighbor, across the corner, is very fond of flowers, and has always grown them, in town and country, from the time when her garden was a city back yard, not much bigger than her parlor now. But then the Grape vine and Trumpet Flower were trained against the wall and fed with kitchen slops poured from the window handy, and her Dahlias, for want of room, were nailed against the rear fence, where, to get the sun, they climbed fifteen feet, by a tape measure, and spread their small but brilliant roses in a show to make an amateur stare. The idea of training Dahlias to a fence is an odd one, but it might be very convenient to small quarters. We rarely meet without some word about flowers. Her Wistarias are pillars of blossom to the roof, and I was surprised to hear her say the largest one had been cut down within five feet of the ground, year before last, leaving only a main stem bare as a walking stick, which sent out this vigorous growth since. Her method is to give the Wistaria, while young, the benefit of all the tea and coffee slops and grounds daily, which acts as food and drink to the plants.

It is hard for inexperienced people to start house vines into satisfactory growth. One woman coaxed her Trumpet Flower for three or four years without getting it higher than the sitting-room windows till her husband buried a dead sheep under it, when it grew like magic. Vines cannot have too much food. The Virginia Creeper grows best from a seedling, we are told. I know cuttings seem to take a year or two to get rooted to suit themselves. A wheelbarrow load of compost when the plant is set is a good persuader, and a pail of slops every other day, with a tablespoonful of Bowkers' lawn-dressing follows it up well. The roots should be protected by coarse lit-

ter the first few winters, or a slow spring growth is the result. The Wistaria needs protection by evergreen boughs or tying up in straw through New England winters, or its buds are killed, and seasons without bloom are the result.

Dr. MAYNARD, who has made his observations on flowers and birds for over forty years, declares that the sparrows eat the buds in winter and spring, and his beautiful Wistaria has gone without blooming for two years in consequence. How lovely some of these vines and shrubs, long tended by able horticulturists, become. Every neighborhood has some noble growth of vine or tree to show, for gracious care given it while young, the best memorial of the careful soul who planted it. A giant white Lilac, growing by the door step of a fine old house in Dedham, this spring, lifted its plumes above the roof, almost three stories from the ground. Such a shrub is worth having as the remainder of a lifetime.

It has always been a favorite rule of mine "that some things can be done as well as others, and it doesn't follow because a thing "has never been done before that it can't be done at all." The neighbor across the way transplanted a large white Lilac bush, in full bud, without injury, this spring, and I think it blossomed. It was quite the middle of March when I saw some fine bulbs of Van Sion Daffodil and Narcissus Poeticus left over from last fall, and carried home a bag full. They were planted in warm sandy soil in a box to sprout; a dozen or so being planted deep in sand in the open border. These came up first, the earliest sprout showing a month after they were set. They have begun to blossom. The Daffodils, like full yellow Roses, are most satisfactory in every respect. Those in the box have been taken up with a trowel as they sprouted, and they keep

sprouting finely, till, by appearance, there will be Narcissus to keep company with Chrysanthemums. I set out Iris in bud, perhaps as careful a thing to manage with its long thready roots as any in the calendar, and it has lived and bloomed. So, if the Crocus is forgotten next fall, never mind, bury it in a hole of sand with a trowel of earth on top in March, in the cool border and try your luck.

Especially should we apply the excellent motto above in the case of acclimating plants. I never will be made to give up the hope of seeing hardy Ivy as luxuriant in this country as abroad. All that our gardens lack is an evergreen vine that will clothe wall and tower, and be beautiful among our winter snows. The Ivy on the old Yonkers church, near the Philipse manor, wreathes windows and and roof, bearing the Hudson winters well; that on St. Peter's, at Perth Amboy, the oldest Episcopal church in the United States was brought here from England, and has grown over the entire north wall and on the roof, where the leaves have entirely changed character and grow round and blunt instead of pointed. And now some one tells me of a friend who brought his Ivy from Chester Abbey, and with care for several winters had so hardened it that it covers the stone walls on his place in the open field, near Worcester. If we can't make the Virginia Creeper evergreen, which I'm not sure can't be done, we must adapt the English Ivy to our New England climate. Can't we find a Siberian or Himalayan evergreen vine, or one from the Caucasus to add to the list. It can't be that Ampelopsis and Bignonia are the only free-growing vines allotted to this corner of creation. When one of your easy forbidding personages tells me, "Oh, you can't make Ivy live over winter in this climate," my inward response, with cast iron lips, always is, "It's got to live." SUSAN POWER.



FOREIGN NOTES.

PERPETUAL CARNATION.

In a recent number of the *Revue Horticole*, a very remarkable article was published on the Perpetual Carnations in their present state. But the writer says: "Where and how was the culture of the Perpetual Carnations commenced? Who is the horticulturist who first did addict himself to it? We do not know." I therefore think that it may interest horticulturists and amateurs to be informed, and I, in consequence, send a copy of their history I published ten years ago in the journal of our horticultural society, which had not a wide circulation. According to several horticultural writers, the Carnation was cultivated more than two thousand years ago; but we know nothing of what was practiced about those times—no more in horticulture than any other science; and as it is only since the beginning of this century that the facts of nature have been studied we can only relate what has been observed lately.

The Perpetual Carnations have been created—created—at Lyon. It was M. DALMAIS, gardener of M. LACÈNE, a celebrated amateur and founder of the first horticultural society in Lyon, who obtained the first real constant-blooming Carnation, about forty-six years ago. He sent it out in 1844, under the name of Atim, the produce of artificial fecundation of a so-called species, known by the vulgar names of Oeillet de Mahon, or of St. Martin, because it was regularly blooming by the middle of November, fecundated by Oeillet Biohon. This first gain was successfully fecundated by the Flemish Carnations, and about 1846 he obtained a great number of varieties of all colors. Mr. SCHMITT, horticulturist at Lyon, followed M. DALMAIS, and obtained several fine varieties like Arc-en-Ciel and Etoile Polaire, which were cultivated for several years, but do no more exist, having been superseded by finer varieties.

But in 1850, a disease having destroyed the collection, Mr. SCHMITT abandoned that culture. Soon after, ALFONSE ALIGATIÈRE, the well known and zealous

propagator, undertook the hybridization of Carnations, and in a short time obtained a great success, and added to that series a great many varieties, all particularly dwarf, and obtained a great improvement by creating those with stiff flower-stems, about 1866. We can thus say that ALIGATIÈRE has created a new species. He has also upset the old system of propagation—that of layering—and has proved that by cuttings is the best and most reasonable method, and justified my saying that layering is the infancy of horticultural art. Nothing, he has proved, is easier than propagating Carnations from cuttings.

The best time to strike them is January and February, and the best mode is to put them in fine sand on bottom heat at about 60° to 70° of Fahrenheit, without bell-glasses, in a double-spanned roof house. The cuttings must be syringed every day and the sand kept moist; they will be rooted in three or five weeks, and must be planted out in April or May and will make fine plants to bloom in autumn; about September they can, those that have flower-buds, be potted for in-door decoration.

JEAN SISLEY, in *Gardeners' Magazine*.

YUCCA IN A CEMETERY.

Yucca gloriosa is almost alone in Britain as a perfectly hardy representative of such tropical subjects as Screw Pines and similar vegetation. And as such, in all stages of growth, but, especially when old and branched, it catches the eye at once, even when associated with other plants. Its stout, quaint trunk, simple or branched, crowned by a rosette of sword-like leaves, is highly suggestive of the Screw Pines, and only requires the prop-roots of the latter to complete the likeness. The special effectiveness of this plant was, the other day, forcibly revealed to me in looking through a large cemetery situated on the outskirts of Norwood. The place I found to be profusely planted with the usual deciduous shrubs and trees—umbrageous, upright, and pen-sive—and also with Laurels and Privets,

Pines and polymorphous Cypresses, all well placed, whether suited as to soil or not, whether in harmony or incongruous in their combinations, because of the loving solicitude which placed them there. Amongst them, occupying no very prominent position, was growing an old, plant of this Yucca. It was the only one of its kind that I saw in the cemetery, and was certainly unique in appearance. The cemetery would have been more attractive, perhaps, had it been freely studded with similar plants, singly and in groups. Too little is made of this attractive subject. We meet with one here, and another there, widely apart. And yet, taken all in all, it is one of the very best ornamental evergreens of moderate growth in these islands, and as such should not be practically overlooked, as it is now, by landscape and other gardeners.

GEO. SYME, in *The Garden*.

PARROT TULIPS.

What we in this country call Parrot Tulips appear to belong to *T. turcica*, the striped Tulip of Turkey. Some have supposed them to be simply monstrosities thrown off by the early-flowering varieties, but Messrs. VILMORIN & CO. and others group them under the heading of *T. turcica*. There does appear, on examination of the bulbs, in its method of growth, and in the characteristics of the flowers, certain specific differences—besides, the varieties are intermediate in regard to flowering between the early-flowering and late-flowering varieties. The species have one fault—the plants are weakly in growth even when well cultivated, and their flowers being large, over-

weight the stalk and bend it down. The petals are irregular, with quite irregular and deeply serrated edges, but they are singularly eccentric in marking and color, and highly attractive. The Parrot Tulips are especially remarkable for their large and curious flowers of an elongated shape before they expand, and when fully expanded, very spreading. The flowers of the same variety will vary in character, sometimes they are deeply slashed into unequal thongs; sometimes simply torn at the edges; sometimes much wrinkled. The colors of the varieties vary from the brilliant red of Feu Brilliante to a clear and dark yellow, sometimes self-colored, sometimes variegated, bordered or flamed with one of these two shades, or of bright green, yellowish, or orange, according to the variety. The arrangement of colors and the form of the flowers imparts to the blooms a singular appearance; and they are well named Parrot Tulips because they have been compared to the plumage of these birds, or to the fantastic forms of the dragons of mythology, hence they are also known as Dragon Tulips. The leading varieties are Feu Brilliante, brilliant scarlet; Monstre Rouge, crimson, large and striking; Mark Graaf, yellow, scarlet and green; Monstrosa, yellow and red; and Perfecta, striped red and yellow. They are easily grown in pots, and this is perhaps the best way to cultivate them because the flowers can be staked, which is necessary in consequence of their tendency to hang down. If planted in the open border, some such support must be given them, or they will be beaten down by rain and wind, splashed with mud, and otherwise injured and their beauty defaced.

R. D., in *Gardeners' Chronicle*.



PLEASANT GOSSIP.

PERSEPHONE.*

She stepped upon Sicilian grass,
Demeter's daughter, fresh and fair,
A child of light, a radiant lass,
And gamesome as the morning air.
The Daffodils were fair to see,
They nodded lightly on the lea,
Persephone—Persephone!

Lo! one she marked of rarer growth
Than Orchis or Anemone;
For it the maiden left them both,
And parted from her company.
Drawn nigh she deemed it fairer still,
And stooped to gather by the rill
The Daffodil, the Daffodil.

What ailed the meadow that it shook,
What ailed the air of Sicily?
She wandered by the brattling brook,
And trembled with the trembling lea.
"The coal-black horses rise—they rise;
O, mother, mother!" low she cries—
Persephone—Persephone!

"O, light, light, light!" she cries, "farewell;
The coal-black horses wait for me.
O, Shade of Shades, where I must dwell,
Demeter, mother, far from thee!
Ah, fated doom that I fulfil!
Ah, fateful flower beside the rill!
The Daffodil, the Daffodil!

What ails her that she comes not home?
Demeter seeks her far and wide,
And gloomy browed doth careless roam
From many a morn till eventide.
"My life immortal though it be,
Is nought," she cries, "for want of thee,
Persephone, Persephone!"

"Meadows of Enna, let the rain
No longer drop to feed your rills,
Nor dew refresh the fields again,
With all their nodding Daffodils!
Fade, fade and droop, O, lilled lea,
Where thou, dear heart, wert reft from me—
Persephone, Persephone!"

She reigns upon her dusky throne,
Mid shade of heroes dread to see;
Among the dead she breathes alone,
Persephone, Persephone.
Or, seated on the elysian hill,
She dreams of earthly daylight still,
And murmurs of the Daffodil.

A voice in Hades soundeth clear,
The shadows mourn and flit below;
It cries—"Thou Lord of Hades, hear,
And let Demeter's daughter go.
The tender Corn upon the lea
Droops in her goddess gloom when she
Cries for her lost Persephone.

"From land to land she raging flies,
The green fruit falleth in her wake,
And harvest fields beneath her eyes
To earth the grain unripened shake.
Arise, and let the maiden free;
Why should the world such sorrow see
By reason of Persephone?"

He takes the cleft Pomegranate seeds;
"Love, eat with me this parting day;"
Then bids them fetch the coal-black steeds—
"Demeter's daughter, wouldst away?"
The gates of Hades set her free;
"She will return full soon," saith he—
"My wife, my wife Persephone."

Low laughs the dark king on his throne—
"I gave her of Pomegranate seeds;"
Demeter's daughter stands alone
Upon the fair Eleusian meads.
Her mother meets her. "Hail!" saith she;
"And doth our daylight dazzle thee,
My love, my child Persephone?"

"What moved thee daughter, to forsake
Thy fellow maids that fatal morn,
And give thy dark lord power to take
Thee living to his realm forlorn?"
Her lips reply without her will,
As one addressed who slumbereth still—
"The Daffodil, the Daffodil!"

Her eyelids droop with light oppressed,
And sunny wafts that round her stir,
Her cheek upon her mother's breast—
Demeter's kisses comfort her.
Calm Queen of Hades, art thou she
Who stepped so lightly on the lea—
Persephone, Persephone?

When in her destined course, the moon
Meets the deep shadow of this world,
And laboring on doth seem to swoon
Through awful wastes of dimness whirled—
Emerged at length, no trace hath she
Of that dark hour of destiny,
Still silvery sweet—Persephone.

The greater world may near the less,
And draw it through her weltering shade,
But not one biding trace impress
Of all the darkness that she made;
The greater-soul that draweth thee
Hath left his shadow plain to see
On thy fair face, Persephone!

Demeter sighs, but sure 'tis well
The wife should love her destiny;
They part, and yet, as legends tell,
She mourns her lost Persephone;
While chant the maids of Enna still—
"O, fateful flower beside the rill—
The Daffodil, the Daffodil."

JEAN INGELOW.

* Another name for Ceres. The daughter of Ceres and Jupiter, and wife of Pluto, who carried her away to the infernal regions as she was gathering flowers in Sicily.

HOW, WHEN AND WHAT.

Please shake out answers to the following from your question box: Must our *Ranunculus* be kept in the cellar here, and when should they be taken up?

What is the disease that curls up the stems of Lilies, and is there a remedy?

What keeps our *Pæonies* from blooming? We have divided the roots repeatedly, but they dislike that, and some clumps of tubers would fill a peck measure, yet they only give a few blossoms; this is particularly true of the pink *Pæony*.

Destructive insects are unusually plenty this season. The aphid on our *Roses* are just exasperating. A Frenchman, who once worked in our garden, remarked, "By'mby someting come along and take everything;" and we begin to think "someting" has come.

In naming wild plants for the garden you omit two or three beauties which we have in successful cultivation. The *Meadow Rue* stands in a partially shaded place, and yearly sends up its cloud of white, which is the admiration of all. Then we have some *Pinxter* shrubs, which are doing well thus far. *Cardinal Flower* we once had near a spring of water, and shall try them on higher ground.

Mrs. C. A. P., *Gouverneur, N. Y.*

Ranunculus tubers can be removed from the ground when their foliage has become dry, indicating maturity. They can be kept in a dry, warm place until ready to plant out in spring. The cellar would probably be too cool and moist for them.

We know of no such disease of Lilies as here mentioned, and should suspect insects as the cause of the symptoms presented.

In the case of the *Pæonies* we can only advise experiment. We are so accustomed to see this plant in perfect health and blooming profusely that we can offer nothing from experience. If the soil is rich, or moderately so, it may be well to set some plants on poor soil, and thus check the tendency to root-growth; on the contrary, if the soil is poor, dig in a quantity of old manure; also, throw a little coarse litter over a plant or two in the fall for fear that some injury may be sustained by the crown of the plant from severe cold.

A CHINESE PRIMROSE.

I have a seedling *Primrose* just about a year old. It is small in size and it has been in bloom since early in the spring. It is the first one I ever had. Will you tell me what to do with it? It does not seem inclined to rest. I wish it to bloom next winter, and do not know what course to pursue. N. D. H.

Pinch off the flower stems, and keep the plant pretty dry for a few weeks. The last of August repot it in good soil and start it into growth for next winter's bloom.

MOLES AND BULBS.

If it is true, as H. K. says, in the July number of your *MAGAZINE*, that moles destroy Tulips, Hyacinths, Crocuses, &c., then I will have to forego the pleasure of raising such blooms, and put something else in their place. It would take a year's crop of Sweet Corn and a ton of arsenic to put even a small dose in each of the runways which abound in our small garden, and you would think that the moles had a contract on hand to build a good many more before the season closes, the way new runways are developing daily. I have always read that moles never did any harm, save to eat up the worms and loosen the earth a bit. Two beds filled with *Gladious*, and which I know are riddled with runways, do not seem to make any difference with their growth, for all are looking finely, but the bulbs were planted rather deep. In our small space of ground Grape vines, Hollyhocks, Pansies, Rose bushes, shrubs, in fact, all the beds and spots are under-run with mole runways.

O. H. B., *Grand Rapids, Mich.*

We do not understand that H. K. says that the moles destroy the bulbs directly, but by working under them leave them to dry out before their proper time of ripening. If Sweet Corn soaked in a solution of arsenic will destroy the little creatures when they become troublesome it is well to know and practice this method, as it is far simpler than any other; and it is probable that a very few moles only can do a great amount of work, so that the bait placed in a few of the runways would probably be effective in destroying all the little rogues.

CLIMBING ROSES NOT BLOOMING.

Will you please inform me, why my Climbing *Roses* do not bloom? I lay them down and cover them in the fall, and in the spring, when I take them up they are commencing to grow; they are very thrifty.

SUBSCRIBER, *Denmark, Iowa.*

We should practice root-pruning in a case like that here described. Before laying down the stems in the fall, dig a trench around the plants about four feet away from the base, and cut off the roots that are met with. If the cause is too luxuriant growth this operation will check it, and when blooming has once commenced that will probably sufficiently tax the strength of the plant to restrain its excessive vigor.

GARDEN INQUIRIES.

Is *Hibiscus Moscheutos* hardy? I have some forty or fifty plants that I have raised from seed, and would rather not lose them.

I notice that Mr. STEELE, in the June number, says that Grapes should not be summer pruned. This is contrary to THOMAS and nearly all advice about training Grape vines. When doctors disagree, who shall decide for the amateur?

Is not mid-summer a better time to prune fruit

trees, at least Apple trees, than early spring? Will not water sprouts be less likely to appear?

A., *Troy, Kansas.*

Hibiscus Moscheutos is hardy in Kansas.

The question about Grape vines was answered last month, and again by Mr. STEELE, in this number.

The best time for pruning depends upon the result desired. If it is to increase the vigor of the tree, early spring pruning is best; if to check its luxuriance and thereby promote fruitfulness, this end can be best attained by pruning in summer.

FLOWERS BY MAIL.

Probably many, like myself, are deterred from sending flowers to friends at a distance by not knowing how to pack them so that they will reach their destination in a state of preservation after being in the mail from two to four days. Will you please give, through the MAGAZINE, directions for packing cut flowers to send by mail.

MRS. M. E. K., *Mayersville, Miss.*

Flowers to be sent by mail should be cut in the morning before the sun has had much effect on them. The best packing material is their own foliage, or instead of that any good foliage. The best package is a tin box or case. Place a bit of moist brown paper at the bottom, lay in the flowers so that they will snugly fill the box, put another piece of damp paper over all, and enclose with the cover. If oiled paper is at hand the box can be lined with it and no damp paper will then be needed. A paper wrapper about the box, securely tied, completes the package. Damp cotton is often tied about the stems of the flowers, but usually this supply of moisture is too great for them when closed from the air, and causes decay. It is unnecessary when packed as before described. Dry cotton is often used to protect the flowers, but it is useless for this purpose, and it absorbs the moisture from the flowers and leaves, and they reach their destination quite wilted.

PLANTS FOR NEBRASKA.

This is a very windy country. What hardy plants would you recommend for a southwest exposure? The wind plays sad havoc among such things as Ricinus, Amaranthus and Cannabis. Also, what perennials do well in this country?

H. H. W., *Scotia, Neb.*

Will not some one among our readers who has had experience, or the opportunity to observe, in similar cases give the information here requested?

ROSE BUDS BURSTING.

I take the liberty of writing to you for information in regard to some Roses that I have had, and of which I send you a few buds of three different kinds. I would like you to say in the next number of the MAGAZINE, what is the trouble with the Roses that they blacken and burst, but instead of bursting from the top they burst from the bottom of the bud, and therefore do not come to perfection. The bushes were full of buds, and none of them opened as they should have done. The leaves are full of a small white fly on the under side. Please give me what information you can.

W. H., JR., *Newark, N. J.*

The trouble with these Rose buds has no doubt been caused by the excessive heat, which has had the effect to cause the flowers to open rapidly, and at the same time the outer petals are somewhat dried and stuck together by their own moisture and that of the dew, making a firm exterior covering that will not part, hence the buds burst at the bottom.

The white fly mentioned is the thrips, and syringing the under side of the leaves with soft soap and water, or whale oil soap, will kill them.

SEEDS OF PERENNIALS.

Will you inform your subscribers how to make Lobelia Cardinalis, Fraxinella, California Poppies and that class of seeds grow? Your Lilium auratum and other plants came in fine order, and are growing nicely.

F. C. D., *Syracuse, N. Y.*

Seeds of perennials often germinate slowly, and they should be sown where they can be seen daily and the soil be kept moist. After sowing and watering it is well to give a mulch of short grass, which will keep the soil from drying out. Sow the seeds in fine light soil, and, if possible, in a place somewhat shaded. A cold-frame is best for such seeds.

FLOWER BED EDGINGS.

In the May number of the MAGAZINE, you answered my question about edging for flower beds in gardens. I ought to have said mine were to be on the lawn. We have put narrow boards around to try to keep the grass out.

MRS. A. G. W., *Winnebago City, Minn.*

Take away the boards and cut the edge of the grass about the bed neatly with a sharp-edged spade or an edging tool. If more convenient, use a large sharp-edged knife. Trim in this way whenever it is necessary, but use the lumber for some other purpose.

STIR THE SOIL.—During dry weather nothing so much benefits the vegetable crops as continued stirring of the soil by hoe or cultivator.

RANUNCULUS.

The Florists' *Ranunculus* is a fleshy-rooted perennial plant, consisting of many varieties with beautiful semi-double and double flowers of many colors. These have been derived from the original species, *R. Asiaticus*.

The Hollanders cultivate this plant quite largely, raising it from seed. The roots can be preserved out of ground a long time in a moderately cool, dry place, secure from frost, and consequently are easily handled in the trade. The roots can be potted in autumn and through the winter, and are easily managed in the greenhouse or a cool window. Use a light,



RANUNCULUS.

rich soil; one tuber to a five-inch pot. Be careful and keep in a low temperature—one from 50° to 60°.

The roots can be set in the open border, if care is used to protect them with litter from frost. A place somewhat shaded is preferable. If there is fear that proper protection from freezing cannot be given, it is best to keep the bulbs in the house until the latter part of March, or until there is a chance in early spring to put them in the ground. The bed should be rich and deep, not dry, poor, or gravelly. The plants grow

rapidly and bloom the last of spring. If dry weather should set in a mulch of grass or hay will be found better than constant watering. The flowers are very beautiful and will delight the interested flower grower.

ROSES.

The beautiful colored plate of Madame Victor Verdier Rose, along with the list given, interested me very much. Two years ago I bought one hundred small plants of Roses of quite a variety, but when they commenced blooming I found they were so different from what I ordered, and what the labels said, that I became disgusted and let them take their chances. The result is that there is only left a *Hermosa*, *James Sprunt*, *Agrippina* and another. Out of a dozen select Roses got about ten years ago, there still remain one *Hermosa*, one *La France* and one *Giant of Battles*. These three are nearly hardy, and are very free bloomers, and by no means poor ones at that.

I have yet to see a Rose of its class to surpass *La France*. Some one writes that it does not bloom freely out of doors. Here none blooms better than it from June to frost. I have budded it on the wild *Prairie Rose* here, and it bloomed splendidly. But a few days ago I took buds of *La France*, *Giant of Battles* and *Hermosa* and set them in a wild *Prairie Rose* by the roadside; it will bloom in less than six weeks and excite some curiosity in passers-by.

My youngest daughter petted a *Star of Lyons* over winter, which was set out in the garden, on which I saw a twig that was a little dull, but that had three sound buds on it. This twig I cut off, assuring her that it would not hurt the plant, and that it was possible that these buds if they took well would bloom as soon as the plant itself. The bark would slip, I found, and these three buds were inserted in three stocks of a common annual Rose. This roth of June these three have seven beautiful buds almost open, while the old plant has but two about as far advanced, but by no means as large as those on the buds.

Not long ago, a lady friend sent me a most beautiful collection of Roses, by mail, put up in such excellent order that they reached me in fine condition. Many of these were cut with a few buds on the

stems, all of which were utilized, and now some of them have taken.

As this budding is different from the usual plan, where the bud is allowed to remain dormant all winter, it may not be amiss to describe my plan, for it is certainly the way to hurry up a good one if the stocks are on hand.

As soon as the sap runs in the spring bud on good healthy stocks, at the same time pinching the tips of the plants budded. In ten days, when the buds have caught, head the shoot back within six inches of the bud, which will force the new bud to start; loosen the bandage as soon as the bud has well caught. When the bud has grown an inch or so, head back to the bud and cement the cut.

If on strong, vigorous stocks, it is astonishing how rapid the buds will grow and what splendid flowers they produce; but few that will not be superior to the same grown on their own roots, as usually treated. Marechal Niel has never done well with me on its own root, while budded it has been very fine.

May I ask why the English name can not be given to Roses as well as to retain the French? For instance, *Perle des Jardins*; why not *Pearl of the Garden*? And *Etoile de Lyon*, why not *Star of Lyon*? Then common people would know what it meant. But this is already longer than I intended to have it. How many better yellow Roses have we than *Etoile de Lyon*?

S. MILLER, *Bluffton, Mo.*

NOTES FROM MY GARDEN.

Last fall I planted a row of Sweet Peas on the 25th of November, and on the first of June last cut flowers from them. They bloomed two weeks earlier than some sown this spring, March 22d.

Tropæolum planted last fall at the same time as the Sweet Peas bloomed June 8th.

My single Dahlias were in bloom the 18th of May.

On March 22d I planted six rows of Vick's Extra Early Pea, and from the six rows I picked eighteen bushels of green Peas. The rows were forty-five feet long and a foot broad.

Snowball and Clark's Champion Cauliflower planted in April was ready to cut June 7th.

Early Minnesota Sweet Corn, planted

April 29th will probably be fit to pull by July 22d.

To-day, July 9th, some fruits of Tomato are full grown and have entirely changed color, promising to be quite ripe in a few days.

By the middle of August, if not sooner, I shall be able to gather a dish of ripe Figs, which are now nearly full grown.

Egg Plants showed fruit July 6th.

I find that insect powder is better than Hellebore for the destruction of caterpillars.

Picotees sown in the spring of last year commenced in June to give a fine supply of flowers.

The first bloom of *Gladiolus* appeared July 8th.

Beets, Parsnips and many kinds of vegetables are greatly injured by the black aphid.

Potatoes showed well early in the season, but have blighted and the yield is small.

Strawberry runners set early will give large, handsome fruit next year. I planted on the 25th of August, last year, the Sharpless and the James Vick, side by side, and have given both the same treatment. I have a high opinion of the Sharpless, and can confidently say that it is a fine fruit. The James Vick, if raised in hills and cared for, will bring in the market the best price for choice fruit for canning purposes. For color and quantity it is beyond my expectations. I shall pot the runners into small pots and plant them out in August, eighteen inches apart each way, and have no fear for the result.

Okra has grown very slowly.

I hope other growers will communicate the results of their garden work.

J. HUNTER, *Rochester, N. Y.*

THE NAMES OF FRUITS.

We regret not to be able to publish this month an article from T. T. LYON, President of the Michigan Horticultural Society, on "The Names of Fruits," and this regret is the greater since it has been prepared as supplementary, in some sense, to our own observations on this subject, given in the last number. For certain reasons it was necessary that the present or August number should go to press early, and it was practically closed on the 6th of July. The article in question will appear next month.

WINTER-BLOOMING GERANIUMS.

I am very much pleased with your *MAGAZINE*, and will give a little of my experience in window gardening. My plants are called very fine, they are loaded with blossoms all winter, every one admires them, many ladies come to see them; the first questions are, how do you make them bloom so freely, and what do you do to them?

I believe that Mr. REXFORD says the double Geraniums are not good winter bloomers; I wish he could have seen my windows last winter, he would never say that again, I know. There are few single ones I consider worth growing, they shatter before they are half open; that is my experience.

Allow me to tell the names of some of mine; and with the proper care through summer and a very little care in winter, I think one cannot keep them from blooming all winter long. First and best, is Madame Thibaut, deep rose pink; Asa Gray, fine salmon; Candidissima plena, snowy white; Mrs. Charles Pease, rich deep pink, upper petals marked with white, very fine; Mrs. Hayes, rosy pink; Cheerfulness, flesh pink; William Hamilton, bright scarlet, large clusters, very fine, a constant bloomer; Jules Simmels, flowers clear, delicate rose, very dwarf and a very free bloomer. All these Geraniums are double, and excellent winter bloomers. There are many more that are lovely and worth paying a good price for, if one loves plants as I do; it takes most of my time to care for them, but it is a labor of love.

Mrs. A. C. T., *Franklin Falls, N. H.*

A SNOW PLANT.

In the July number notice was made of a Snow Plant received from California, and some readers may be pleased to have the following account, given by the Los Angeles *Herald*, of a fully developed specimen sent to the office of that journal: "The specimen presented was gathered out of the snow on the Sierra Nevada mountains at Yosemite, three days since, and is a very fine one indeed. It is about fifteen inches high, two inches in diameter, with a small trunk on which cluster numerous red blossoms shaped like Strawberries, each blossom being supported by a spear-shaped red leaf.

The trunk is covered with bloom even on the top, forming a structure shaped like a huge stalk of Asparagus. To those who never saw this curious flower before, it is a most interesting sight."

A GREAT OFFER.

The publishers will send this *MAGAZINE* for the remainder of the present year and for all of 1887 to new subscribers for the price of one year's subscription, one dollar and twenty-five cents. Commencing with the September number and continuing through next year will make sixteen numbers for the price of a single volume. We hope our friends will mention these terms to their neighbors, thus affording them the opportunity to avail themselves of this great offer.

AMPELOPSIS VEITCHII.

Some one writing of the Ampelopsis Veitchii, says he does not succeed in getting it to cling to smooth painted wood. My experience is, that it is necessary to tack it up with double pointed tacks the first year to induce it to cling. Late in the season it sticks, and the next year it goes right along toward the top of the building. A neighbor of mine has a large frame barn painted, and this plant has climbed to the top in four years, and is very beautiful. M. P. A., *Rockford, Ill.*

JAMES VICK STRAWBERRY.

For two years I cultivated the James Vick Strawberry, and concluded you were made a victim for name's sake. Several fruit men had the same luck as myself, and the plants were nearly all turned under; but I set out a small bed in hills, and they have done splendidly this year. I have twelve or fifteen varieties, and none of them compare in yield, and the size is about the same as Cumberland or Manchester. C., *Westfield, N. Y.*

THE DWARF JUNE-BERRY.

Western fruit-growers report the June-Berry as a valuable fruit producing plant when cultivated in the garden. It is mentioned as the Dwarf June-Berry, growing about five feet high. Probably it is the variety Oblongifolia of Amelanchier Canadensis. A report in regard to it from any of our readers who are raising it will be acceptable.

OUR YOUNG PEOPLE.

UNCLE DOLPH.

"O, yes, I understand," growled Captain Torrence, "you young land-lubbers think because the old folks have gone out that I'll spin another yarn. I've found you out. There's never an evening like this when things are quiet, and the fire bright and cheery, and my old foot has let up paining a bit, but you settle down larbo'rd and starbo'd of my chair, and look at me as much as to say, 'won't you tell us about your sea travels, Uncle Dolph?' and if that's what is in the wind to-night, you can just turn tack and haul in; for no, I won't. It's bad enough to be storm stayed in this dull port of a chimney corner, with that mutinous foot anchored to an ottoman, half the time keeping me awake till the second watch, without you all taking advantage of every lull to gather around me, for all the world like a shoal of seals around a vessel, with their heads up, expecting grub to be thrown overboard to them."

"There! you needn't ask questions—of course they learn to expect it; so many traveling simpletons, especially ladies, like to feed them. Why don't some of you go aft and get that chart out of my locker? you might know I'd want it; needn't grin—I'll spin no yarn this night—you're spoiled enough already. Rudolph, you go to the fore and grapple my foot, easy-like, and turn up the keel toward the fire. There, that'll do. That foot feels like it weighed a ton."

"Now, give me my chart. S'pose you older ones think you know it all, since you've left your old studies behind and got into physical geography, and mental geography, and the deuce knows what all;—stop your giggling—but I'll wager my best tarpaulin that you never even heard of Adam's Bridge."

"I didn't know," said little Esther, "that there was a bridge in the Garden of Eden."

"Whew!" puffed Uncle Dolph, "if an oyster could chatter, that's just about what it would say; but, never mind,"—

drawing her up to him—"bless your sweet, little piping voice for the sake of her you're named for;" and his voice dropped into a gentle cadence. Reassured, the child thought to be conciliating, also, and said:

"Papa says that before you had so much trouble, losing her, and having to give up your ship for this sore foot, that you wasn't so crabbed."

"Crabbed, eh? was, too. Perfect angel now compared to then. Go sit down." Then Hattie threw oil on the troubled waters by asking where Adam's Bridge is to be found.

"Humph! I knew you didn't know. Here it is, between India and Ceylon, of course. Where else could it be?" and he pointed on his water-map to where two dotted lines represented the bridge—so called—connecting the island of Manaar, near the N. W. coast of Ceylon, with the Ramisseram island near the mainland, a distance of more than thirty miles.

"The bridge is formed of bold rocks and sand-banks, a portion of which are always above high water, and no part is ever more than three or four feet below. This channel you see here, between Manaar and the coast, is too narrow for any but the smallest craft. The 'Paumben Passage,' next the Indian coast, was no better till recently. A lovely time navigators used to have in making a passage—say from the Malabar to the Coromandel coast—by having to go away 'round Ceylon, which is itself nearly as large as Iceland—just five-sixths as large. So, at last, the channel has been deepened, at great cost, I s'pose, and now it can be used by vessels drawing not more than ten feet of water."

Then trilled out little Esther: "I've heard of Adam's fall in the Sabbath-school; did he fall off of that unlevel bridge of big rocks and sand-banks?"

"O, no, little Clam; that strange bridge, thirty miles long, and built with-

out hands, takes its name from a steep mountain on the island. But now I'll have to lay to, a bit; that foot 's lurched over and twists my ankle; lay a reef in the cushion, Dolph, boy, and tuck it in there, leeward of the fire. Now, she's righted; that will do. Now, get your own maps and trace out the locality of Adam's Bridge."

After leaning back his head, with eyes closed, for a while, Uncle Dolph resumed: "I've been thinking all day about that island of Ceylon, and of the ravishing picture it makes when 'approached from the west or south. Dolph, I wish you'd remember that there's hardly, in all the world, a sight to equal it in beauty."

Here the old captain paused again, with a far-away look into the fire, while his face softened as though recalling some beautiful vision of the past that had enchanted him. When he spoke again his mood seemed wholly changed, and his voice was gentle.

"Yes, I remember as though 'twere only yesterday the time we sighted that island, when your aunt Esther—your father's aunt—was voyaging for her health; but there was no health for her, poor woman. She had been famishing for a sight of land, and a smell of green, growing things for days. When she saw the palm-fringed coast of Ceylon in the distance, the trees looking as if they sprang from the water, she said if the Celestial country looked as lovely as that when she approached it, she'd be more than satisfied. A lovelier sight never greeted a weary seaman, or ocean-sick invalid.

"A lofty mountain, rising abruptly to a height of 7352 feet, and surrounded by picturesque hills, is called Adam's Peak, and is not only the crowning beauty of the island as you approach it, but proves a welcome landmark for navigators, long before the tall light-house at Columbo, hidden by palm groves, can be sighted. Find Columbo on your maps. Well, forty-five miles east of that city is the big mountain. It is said there are higher ones further inland, but none so bold and imposing in form. It's top is a flat surface, comprising a space of seventy-four feet by twenty-four feet."

"Was Adam ever up on that peak," piped little Esther, feeling sure that

Adam's proper place was strictly within the garden of Eden.

"Of course not," replied Uncle Dolph, "but there is a large foot-print up there, in the flat rock, which measures five and a half by two feet in extent. The Mahometans named it for Adam, though the Buddhists claim it for Buddha, and the Brahmins for Siva. But this is the way the mountain got its name, and from that the bridge was named.

"The foot-print, though so immense, is edged all around with gems, and covered from the weather by an ornamental roof, and the place guarded by priests. A shrine is here maintained by a rich monastery, half way down the mountain, at which the pilgrims from all parts of the East come to worship. Now, Archie, you've been so quiet, you may ask me some questions about Ceylon."

"Thanks; what interested you most after Adam's Peak?"

"The cinnamon gardens, so called, near Columbo. They are so extensive that here they would be called plantations, or farms. The choicest cinnamon in the world is grown in that climate, and the most of it. The same plants grown elsewhere do not yield so fine a flavored bark. The soil in which it thrives best is pure white sand, very deficient in vegetable matter; to see it you would think that no vegetable life could be supported by it."

"Did you load your ship with cinnamon?"

"Not altogether, my boy. But now, I've got to lay to again, and change my bearings. Heave on some coal in the grate, Archie, this side of me is getting chilly. Now, all hands help swing my old hulk 'round, so as to give me a broadside to the fire; steady my feet, there, you Hattie! These castors are a good thing in house navigation. There, now I'm all right.

"No, not all cinnamon, Archie; I took in lots of coffee, and some satin-wood and ebony, and a sprinkling of pearls. The latter must have been smuggled from the pearl fisheries which are off the coast some miles distant, the same being controlled by the British Government. But it was their business to look out for smugglers, not mine."

"Are all the wild animals of India in Ceylon?"

"No, indeed, a small, black bear is said to be the only quadruped dangerous to man. But elephants and buffaloes are found in great numbers in the interior, as well as various smaller animals, common to the tropics. Besides anacondas, from twenty to thirty feet in length, there are four varieties of poisonous serpents. Crocodiles infest the rivers, and sharks the coast. Various fishes, remarkable for their brilliant coloring, are found in the coast waters; among them, the red sea-perch, the great fire-fish, and the flower-parrot. There are many birds of brilliant plumage, but they are surpassed by those of Northern India and South America. There, you don't want to hear any more; if I talked all night, I should only have begun."

"O, yes, we do; you haven't told us a word yet about the curious plants, and the people," exclaimed Hattie.

"Plants and people! endless subjects, both of 'em. Hand that mug, and let me wet my whistle. Of all the plants your Aunt Esther saw, the true mustard tree of scripture, *Salvadora persica*, interested her the most. As to the people, the natives are called Sinhalese, from one of the names by which Ceylon was known to the Greeks and Romans. They number over one million and a half, and in religion, are Buddhists, with the ex-

ception of about 150,000, which are Christians. Their dynasty of kings can be traced back 2000 years. The last sovereign of the line was cruel and tyrannous, and in 1815, was subjugated by the British, the government of the island passing into their hands.

"Among the Sinhalese, every trade is a caste, but the distinctions of caste are not recognized by their religion, for Buddha says that—

"A man does not become low caste by birth; nor by birth does one become high caste. High caste is the result of high actions, and by actions doth a man degrade himself to a caste that is low."

"Good words to wind up with, for here come the folks at last. You'll have to study up Ceylon for yourselves; the more you learn of its present and past history, the more you'll be interested. Hattie! here you are. Have I had good care? Yes, yes, capital; the midgets kept me all fixed up in good ship-shape. Crabbed as I am, they have a warm side for me!"

When Uncle Dolph had been wheeled to his room, little Esther whispered to her papa that he had told them about Aunt Esther and Ceylon, and wasn't so crabbed after that; and papa said:

"Poor Uncle Dolph!"

MARIA BARRETT BUTLER.

EDITOR'S MISCELLANY.

FLORA OF NORTH AMERICA.

The great work describing in systematic arrangements all the plants of this continent, which Dr. Asa Gray and his co-workers have been engaged upon for many years, is making progress. Necessarily it requires a long time to accomplish it. Two parts have now been separately issued, and more recently these two parts have been bound into one volume, with a complete index of genera, species, synonyms, etc. This volume comprises all the Gamopetalous Dicotyledons, and therefore is complete in regard to this great division of plants. It is a work which will prove of the greatest benefit to all plant students in this country, and one of which they have all felt the need. The price of this work of nine hundred and seventy-four pages, imperial octavo, has been put at only five dollars, thus placing it within the reach of all students.

The arrangement of the work is beyond criticism; the descriptions are full and entirely satisfactory.

The publishers, Ivison, Blakeman, Taylor & Co., of New York and Chicago, have performed their part of the work in a manner that sustains the enviable reputation they have long maintained. Before the whole work, *Synoptical Flora of North America*, can be completed, some years must elapse, as experience has shown, and as so stated in a note in the present volume, and in the meantime students must rely upon the sectional floras that have been published.

LOUIS AGASSIZ.

We have had no greater pleasure in a long time than the perusal of the life and correspondence of Louis Agassiz, edited by the widow, Elizabeth Carey Agassiz, and lately issued from the Riverside Press, Cambridge, Massachusetts, by Houghton, Mifflin & Co., of Boston.

In his life and letters we have the record of one of the greatest naturalists of the present century. His predilections for the investigations of nature commenced in childhood and strengthened with his growth. In his college and university life some of his intimate associates were those who also became famous and have linked their names to the annals of science. At the age of twenty-two he completed his great work on the Brazilian fishes, which gave him a high standing among scientific men. Cuvier and Humboldt became interested in him and were his devoted friends, giving him their assistance and influence.

In 1846, at the age of thirty-nine, he came to this country, and soon after made Boston his home and became an American citizen, and his splendid course and great influence in scientific circles is known to many of us.

This work is especially valuable for young people, and should find a place not only in private collections but in all school and public libraries, where it can be easily reached by everybody.

HOLLAND BULBS, PLANTS, ETC.

In the following pages we give a full list of Hardy Bulbs and Plants for fall planting, and plants for winter flowering, and ornamental parlor plants, such as Hyacinths, Tulips, Lilies, Pæonies, Roses, &c. In most cases the descriptive matter is accompanied with illustrations. This list has been selected with great care, and we feel sure our readers will be pleased with any selection they may make if they will only give the bulbs or plants a fair chance.

Suggestions to Every One Ordering Bulbs, Etc.

ALL SEEDS AND BULBS FREE OF POSTAGE.

We will send Seeds and Bulbs by mail, to any part of the United States, AT THE PRICES NAMED IN THE CATALOGUE, POSTAGE PAID. The only exceptions to this rule are when Grass seed, and other heavy and bulky articles are ordered by the peck or bushel, or in cases especially noted.

FREE BY EXPRESS.

All orders over two pounds weight will be forwarded by Express, if possible. Our customers will oblige us very much by giving their nearest office and the Name of the Company delivering goods. Heavy orders can be forwarded by stage from the Express office. So please be particular and send special directions when on a Stage route. This applies to Seeds and Bulbs at Catalogue rates, and not when special prices are made for large quantities, or on such by the peck or bushel, nor on miscellaneous articles, such as Brackets, Rustic Work, Pots, Implements, &c. See introduction to Plant List, page 269.

THE SAFE ARRIVAL OF PACKAGES GUARANTEED.

We guarantee the safe arrival of packages of Seeds and Bulbs in good condition in every case. If a package fails to reach a customer, we will send again as soon as informed of the fact; or if any part is injured or lost, we will replace it.

HOW TO SEND MONEY.

ALL MONEY MAY BE SENT AT OUR RISK AND EXPENSE, if forwarded according to directions, in either manner here stated.

- 1st. *Post Office Money Orders*, to be obtained at many Post Offices, but not at all, are perfectly safe, and will cost from 8 to 25 cents. This is the best way where practical.
 - 2d. A *Draft on New York* can be obtained at any Bank for about 25 cents, and this is sure to come correctly.
 - 3d. *Express Money Orders*, to be obtained at all offices of the American or United States Express Companies.
 - 4th. *Greenbacks*, in amounts not less than Five Dollars (\$5.00,) can be sent by *Express*, and these we are sure to get, and the cost is very little.
 - 5th. *REGISTERED LETTERS*. — When money cannot be sent by either of the first four methods, it may be enclosed in a Registered Letter. The cost of registering is 10 cents.
 - 6th. *The expense of forwarding money in either of the above ways we will pay, and the cost may be deducted from the amount forwarded.*
 - 7th. *SUMS LESS THAN ONE DOLLAR* may be forwarded by mail at our risk without registering.
- When remittances are not made according to these directions, we disclaim all responsibility. There is no safety in Postal Notes, and are sent at RISK OF SENDER.

JAMES VICK, SEEDSMAN, Rochester, N. Y.

HYACINTHS.

The accompanying list of named varieties embraces the best kinds known. These Bulbs are selected in Holland solely for our sales, and we have reason to believe are the best that reach America. Even our unnamed kinds are fine and large, and customers often write us that they bloomed better in the house than the named Bulbs they have been in the habit of receiving from other sources. While we do not recommend the unnamed Bulbs for this purpose, those who plant them will be surprised to find how good they are. The greatest difficulty is that with unnamed Bulbs we cannot give the different shades, all tints of red, including the pinks and roses, being classed together, and the same with other colors. Persons, therefore, ordering blue, for instance, may get a very dark or light porcelain. This is not of much consequence where half a dozen or so are ordered, for the variety will be usually what a good judge would select, but where only one or two are desired, the color is not always such as would have been chosen.

NAMED HYACINTHS.

DOUBLE BLUE.

A la Mode , light blue, dark center, good spike; earliest; low,	25
Bloksberg , bright porcelain striped, fine large truss; early,	25
Bride of Lammermoor , dark blue, variegated center, good truss,	25
Carl, Crown Prince of Sweden , violet blue, large spike; early; very fine,	25
Comte de St. Priest , light porcelain, good bells, fine truss; early,	30

Crown of India , dark purple, good truss; fine; low; early,	30
Garrick , fine deep blue, good bells, handsome truss; early,	25
General Antink , porcelain, dark center, good bells; early; very fine,	25
Habit Brilliant , porcelain, very fine,	30
King of Wurtemberg , dark blue, good spike; early,	25
Laurens Koster , fine dark purple, large truss; early; low,	45
Lord Nelson , splendid light blue,	50
Lord Raglan , fine deep blue, dark center; fine truss; early,	25

Lord Wellington, blue, dark center, fine bells; early,	25
Louis Philippe, dark blue, shaded with lilac, large truss; fine,	50
Mignon de Drijfhout, porcelain, semi-double, good truss; early; tall; fine,	25
Murillo, bright blue, fine bells and truss; early,	30
Othello, very dark, large bells, compact truss; early; low,	25
Prince Albert, blackish-purple, compact truss; early; low,	25
Prince Frederick, dark lilac, good truss; early; fine,	25
Prince of Saxe-Weimar, dark blue, semi-double, large spike; early,	25
Shakespeare, extra fine light blue,	50
Sir John Franklin, porcelain-blue,	40
Van Speyk, light blue, large compact truss; very fine,	35

DOUBLE WHITE.

Anna Bianca, pure white,	30
A la Mode, white, violet eye; earliest,	25
Anna Maria, creamy white, purple eye, compact truss; earliest,	25
Grand Vainqueur, pure white, large bells, fine truss,	50
Grootvorstin, pure white, yellow eye, large spike,	35
Jenny Lind, pure white, dark purple eye, compact truss; early,	25
La Deesse, pure white, yellowish eye; low; early,	25
La Tour d'Auvergne, pure white, good bells, fine large truss; earliest,	25
La Virginite, bluish white, good bells; early,	25
Lord Anson, bluish, rose center, good truss,	30
Mathilda, white, rosy eye; earliest; very fine,	25
Miss Kitty, creamy white, violet eye, large bells; early,	30
Miss Nightingale, pure white, large bells, fine truss; extra fine,	75
Non Plus Ultra, pure white, deep violet eye, large bells and truss; tall,	25
Prince of Waterloo, pure white, large bells; early; very fine,	30
Pyrene, pure white, good bells and truss; early,	25
Sceptre d'Or, pure white, yellow center, good bells and truss,	25
Sir Bulwer Lytton, waxy-white, large bells,	40
Triumph Blandina, bluish, rose eye, extra fine truss; early; tall,	30

DOUBLE RED AND ROSE.

Alida Catharina, satiny-rose, green tips, very fine; earliest; low,	25
Bouquet Royal, fine light rose, dark center, good spike; early,	30
Bouquet Tendre, carmine rose, good truss; fine; earliest,	25
Cochinelle, (Eclipse,) fine deep carmine; early; low,	25
Comtesse de la Coste, bright pink, purple eye, fine spike; early,	25
Czar Nicholas, bluish, good spike; early; tall,	25
Frederick the Great, pink, large spike,	50
Gæthe, rose, dark center, fine bells, large truss; early,	30
Gogel, pink, fine bells,	50
Grootvorst, bluish, large bells and spike; early; very fine,	25
Ida Pfeiffer, extra fine red,	50
Josephine, deep pink, fine truss,	50
Koh-i-noor, fine rose, immense spike, semi-double; splendid,	50
L'Esperance, rose, red striped; fine; early,	25
Le Grand Conquerant, pale rose, large bells and fine compact truss,	50
Lord Wellington, delicate bluish, very large bells, fine spike; early; low,	35
Louis Napoleon, deep carmine, good truss,	60
Milton, carmine-rose, large truss; extra,	100
Noble par Merite, deep rose, splendid truss; earliest; low,	25
Panorama, bright rose, carmine stripe, fine bells; early,	25
Princess Alexandra, bright pink, large bells,	50
Princess Royal, rose, dark center, fine stripe; early,	25
Queen Victoria, fine rose, good bells and truss; early,	25

Sir Joseph Paxton, deep carmine, green tips, good truss; earliest,	35
Sir Thomas Grey, dark rose, large bells, fine spike,	30
Sir Walter Scott, light rose, large bells; very fine,	40

DOUBLE YELLOW.

Bouquet d'Orange, pinkish-yellow, fine spike; early,	35
General Kohler, fine yellow, good spike,	35
Gæthe, light yellow, fine bells and truss; early,	30
Jaune Supreme, fine yellow, good truss; tall; early,	40
Louis d'Or, yellow, rose eye; late,	30
Piet Hein, pale yellow, good spike; early,	30
William III, apricot color,	35

SINGLE BLUE.

Auricula's Eye, dark blue; extra fine,	40
Baron van Tuyt, dark blue, large compact truss; tall,	25
Bleu Mourant, deep blue, compact truss; very fine,	25
Blondin, splendid porcelain, large bells and spike,	40
Canning, light porcelain-blue, fine spike,	50
Charles Dickens, porcelain blue, shaded with purple, excellent spike; tall,	25
Couronne de Celle, pale blue, large bells and spike; very fine,	30
Czar Peter, splendid light blue, large spike; extra,	40
Grand Lilac, fine light porcelain, large bells, splendid truss; tall,	30
Grand Master, deep porcelain-blue, large spike,	50
Grande Vedette, light porcelain, finely shaded, large bells, fine truss,	30
Grand Vainqueur, deep porcelain, fine large bells and spike; tall,	30
Horace Vernet, dark blue with white eye, large bells and truss,	25
John Bright, light blue, large spike,	35
Keizer Ferdinand, fine deep blue, dark stripe, good truss,	25
King of the Blues, rich dark blue, splendid spike and bells,	30
La Belle Africaine, very dark, large spike; tall; fine,	35
La Peyrouse, clear porcelain, fine bells and spike,	25
Leonidas, bright blue, large bells and spike,	25
Lord Derby, pale porcelain-blue, fine large truss; extra,	50
Marie, deep blue, fine large spike,	25
Mimosa, fine purplish black, large compact truss,	25
O'Connell, very dark blue, good truss,	25
Oronates, porcelain, large bells and spike; tall; very fine,	35
Pieneman, dark porcelain, immense bells, large flower,	30
Porcelaine Sceptre, very fine bells and truss,	25
Prince Albert, deep rich purple, fine spike; low,	30
Regulus, fine light porcelain, large bells and spike,	25
Uncle Tom, blackish-purple, fine truss,	25
William I, purplish-black, fine truss,	25

SINGLE MAUVE OR PURPLE.

Adeline Patti, purplish-violet,	50
Charles Dickens, violet-purple, very fine,	50
Haydn, lilac-mauve, fine large truss,	50
Jeschko, splendid violet, large spike,	30
L'Ami du Cour, purplish-lilac, good spike,	25
L'Unique, purple-mauve, good spike, tall,	25
Lord Mayo, violet, white eye; extra,	10
Sir Wm. Mansfield, mauve, splendid truss,	50
Tollens, violet, shaded with lilac,	35
Van Vree, lilac,	40

SINGLE WHITE.

Alba Maxima, pure white, fine, large bells and spike; tall,	40
Alba Superbissima, pure white, handsome spike,	30
Anna Paulowna, bluish-white, good bells, large spike,	25
Baroness van Tuyt, pure white, fine truss,	25
Bella Donna, pure white, small bells, compact truss; very fine,	25
Belle Esther, pure white, small bells, good spike,	25

Blanchard, pure white, fine, large spike, tall, . . .	30
Cleopatra, bluish-white, large bells; fine, . . .	25
Crown Princess of the Netherlands, pure white, fine bells and spike; low, . . .	40
Elfride, bluish-white, large bells; fine, . . .	30
Grande Blanche Imperiale, bluish-white, compact truss; fine, . . .	30
Grandeur a Merveille, rosy-white, very large bells, large truss, . . .	25
Grande Vedette, pure white, large bells, good spike; tall, very fine, . . .	30
Grand Vainqueur, pure white, fine, compact truss; tall, . . .	35
La Belle Blanchisseuse, purest white, large bells, fine spike; low, . . .	25
La Candeur, pure white, fine, compact truss, low, . . .	25
La Grandesse, pure white, large bells, fine large spike; extra, . . .	60
Lord Grey, rosy-white, good spike, . . .	25
Madame Talleyrand, pure white, large bells; tall, fine, . . .	30
Madame van der Hoop, pure white, fine large bells, good spike, . . .	30
Maid of Orleans, pure white, fine spike, . . .	25
Mammoth, creamy-white, extra large bells, fine, . . .	25
Mina, pure white, fine large bells and spike; extra, . . .	50
Mont Blanc, pure white, splendid, large truss, . . .	40
Paix de l'Europe, very fine snow white, large bells and spike, . . .	35
Queen of the Netherlands, pure white, fine bells and spike; tall, . . .	35
Queen Victoria, pure white, fine bells and spike; tall, . . .	25
Rousseau, bluish-white, fine bells, good spike; tall, . . .	25
Vesta, creamy-white, fine truss, . . .	25
Voltaire, creamy-white, large bells, fine truss, . . .	25

SINGLE RED AND ROSE.

Agnes, bright red, fine truss; low, very fine, . . .	25
Amy, bright carmine, fine truss, tall, . . .	25
Appellius, crimson, fine truss, . . .	25
Baron van Tuyl, very fine pink, large compact spike, . . .	30
Belle Quirine, red, deep rose-striped, fine truss, tall, . . .	25
Cavaignac, salmon, deep rose striped, large bells; distinct shade; extra, . . .	75
Charles Dickens, very fine rose, large truss, . . .	50
Circe, deep carmine; extra, . . .	50
Cloche Magnifique, pink, extra large bells, . . .	60
Cosmos, dark rose, clear center, large spike; tall, beautiful, . . .	25
Deliah, pink, good spike, . . .	25
Diebitsch Sabalkanski, bright crimson; fine, . . .	25
Eldorado, deep crimson, beautiful truss, . . .	25
Fabiola, pink, carmine striped, fine shaped large truss; extra, . . .	50
Fireball, deep red, fine spike; low, . . .	25
Gare les Yeux, brilliant red, compact truss; low, . . .	30
General Pelissier, brilliant carmine, fine truss; early, . . .	50
Grand Vainqueur, beautiful rose, fine, large truss; tall, . . .	25
Hermina, pink, very fine; low, . . .	25
Homerus, dark rose, compact truss; very fine, . . .	35
Howard, dark red, fine bells; splendid, . . .	50
Incomparable, deep carmine, splendid color; extra, . . .	1 00
Jenny Lind, pink, fine truss; low, . . .	25
King of the Belgians, fine deep scarlet, good truss, . . .	1 00
L'Adorable, rosy-red, or pink, beautiful truss, . . .	25
Lady of the Lake, delicate rose, fine truss, . . .	35
L'Ami du Cœur, bright rose, compact truss; very fine, . . .	25
Le Profite, rose, carmine striped, fine, . . .	35
Lina, rich crimson, fine spike, fine bells; extra, . . .	60
Linnaeus, bright scarlet, large truss, fine bells; extra, . . .	1 00
Lord Macauley, rose, carmine striped, large truss, . . .	35
Madame Hodson, pink, carmine-striped, good truss, . . .	25
Maria Theresa, pink, purplish-shaded, very fine, . . .	25
Mrs. Beecher Stowe, beautiful rosy-red; extra, . . .	50
Neerlands Glorie, orange-red, striped, compact truss, fine, . . .	25
Norma, pale pink, large bells, good truss; tall, . . .	25
Prosper Alpini, crimson, very fine truss, . . .	30
Queen of Beauties, rose, large bells; fine, . . .	50
Queen of Hyacinths, bright crimson, fine truss, . . .	30

Queen Victoria Alexandrina, dark carmine, fine, compact truss, . . .	25
Robert Steiger, fine, deep red, good, compact truss, . . .	25
Satella, dark red, compact truss; tall, fine, . . .	25
Solfatare, bright red, orange-yellow centre, very fine truss; tall, . . .	35
Sultane Favorite, blush, pink-striped, good bells, very fine, . . .	30
Temple of Apollo, blush, large bells; tall, very fine, . . .	30
Tuba Flora, blush, large bells, very fine, . . .	30
Veronica, carmine-red, fine, compact truss; low, . . .	25
Von Schiller, deep pink, crimson striped, large truss, . . .	40

SINGLE YELLOW.

Adonia, orange-yellow, good truss, . . .	25
Alida Jacoba, canary-yellow, compact truss, . . .	25
Anna Carolina, clear yellow, good bells and spike, fine, . . .	40
Bird of Paradise, bright yellow, fine truss, . . .	1 00
Fleur d'Or, fine yellow, good truss, . . .	25
Heroine, bright citron, green tips, fine truss, . . .	25
Ida, primrose-yellow, fine large spike; extra, . . .	60
King of the Yellows, pure yellow, perfect spike; extra, . . .	1 50
Koning van Holland, pale orange, good truss, . . .	30
La Grande Jaune, buff-yellow, good spike, . . .	40
La Pluie d'Or, pale yellow; low, . . .	25
L'Or d'Australie, golden-yellow, long truss, . . .	50
Obelisque, fine pure yellow, splendid spike, . . .	1 00
Piet Hein, pale yellow, . . .	30
Rhinoceros, salmon, good truss, . . .	25

To those who prefer to leave the selection to us, we will furnish Hyacinths from the above list at the following prices per DOZEN, each dozen to contain a good selection of the different and most desirable colors, single and double, and all first class Bulbs:

No. 1.—One dozen fine named sorts, for pots or glasses, . . .	\$2 50
No. 2.—One dozen choice named sorts, for pots or glasses, . . .	3 00
No. 3.—One dozen extra fine named sorts, for pots or glasses, . . .	4 00
No. 4.—One dozen choicest named sorts for pots or glasses, . . .	5 00

Those who desire them for pots or glasses for winter flowering, will please state the fact, and we will select the kinds best adapted for the purpose. Those who have a particular choice of two or three varieties that they wish sent in the dozen, shall be accommodated as far as possible. As a general rule, Single Hyacinths are much the best for the house, only a few of the double kinds doing uniformly well for house culture. Where the selection is left to us, our friends, therefore, must not be surprised to find at most only three or four double varieties in a dozen. Where customers design to flower Hyacinths in water, we seldom send double varieties unless particularly requested to do so.

UNNAMED HYACINTHS.

The mixed or unnamed Hyacinths will do well for out-door culture, and they can be obtained at comparatively little cost; but the flowers will not usually be as fine as those from named Bulbs, every one of which is selected particularly with reference to flowering in the house. These unnamed Hyacinths, however, are all large, excellent Bulbs, imported directly from Holland, and will give good satisfaction. Indeed, they often flower admirably in the house, though we do not recommend them for this purpose.

MIXED HYACINTHS, 25 cents each; \$1.50 per dozen; \$9.00 per 100.

Double Blue.	Double White.	Double Red.
Single Blue.	Single White.	Single Red.

ROMAN HYACINTHS.

Early Roman White Hyacinths, desirable for early flowering, each, 10 cents; doz. \$1.00; 100 \$6.00.

TULIPS.

The Tulip is so perfectly hardy, flourishes so well under the most ordinary care, and is so varied and brilliant, that it never fails to give the greatest satisfaction. It is adapted to open air culture in nearly every country and locality, and for window gardening is unsurpassed. The Tulip is dashing and showy, of the most brilliant and varied and delicate coloring, and desirable even as single specimens, but it is when grown in masses that the finest effect is produced. Nothing in the floral world can equal the dazzling brilliancy and gorgeousness of a bed of good Tulips. The early varieties are excellent for house culture.



DUC VAN THOL TULIP.

Any good garden soil will do for the Tulip. A very rich soil is not necessary, though well-rotted manure, rotted sods, or leaf-mold may be applied when the earth is poor. See that the drainage is good before planting. Plant in October and November. Make the soil fine and deep. Set the *Early* flowering kinds five inches apart, and the *Late* varieties six inches. Cover three inches deep. After Tulips have done flowering they can be taken up and planted close together in any corner of the garden until it is time to replant in the beds in the autumn, or Verbenas or other bedding plants can be set out between the rows, and before they cover the ground the leaves of the Tulips will be sufficiently ripe to be removed, and the ground raked off.

Tulips are divided into two general classes, *EARLY* and *LATE*, and these again into several others. The earliest Tulips flower in this latitude the latter part of April, and by a proper selection of early and late sorts a good display can be kept up for more than a month, if the weather prove tolerably cool and moist.



SINGLE EARLY TULIP.

Early Tulips.—The *earliest* of the early class is the DUC VAN THOL, single and double.



DOUBLE TULIP.

They are in bloom here in April. The single varieties are of fine colors—white, yellow, scarlet, crimson, etc., growing about six inches in height, and make brilliant, dazzling beds. They are also excellent for flowering in the house during the winter, three or four in a pot. The double variety is about the same height, red, bordered with yellow. We recommend those not acquainted with them to try a few Duc Van Thols for winter-flowering in pots, or boxes, or baskets. Let the soil be very sandy, and if mixed with a little moss, all the better.

The *TOURNESOL* follows the Duc Van Thol, with very large, *double* flowers, keeping in bloom a long time, and very desirable in all respects. Two varieties, orange and red, and very fine yellow. Good for pot culture in winter.

Following the *Tournesol*, is a large class of *SINGLE EARLY TULIPS*, containing very many splendid varieties. They flower early, before the sun becomes very hot, and hence continue in perfection longer than later kinds. These can always be depended upon for a brilliant and enduring bed. No class of Tulips is more desirable than this one. These, like the preceding kinds, make fine specimens when grown in pots in the house. For bedding in masses, and for the formation of ribbon beds, these Single Early Tulips are unsurpassed.

Double Tulips.—The DOUBLE TULIPS are becoming more popular every year, and this popularity is not undeserved. Some are beautifully formed, with delicate shades and stripes; others are as large and brilliant as the old Pæony, while others of equal size are fine yellow, rose, white, etc. The list of named varieties, possessing more or less distinctness, is quite large.



PARROT TULIP.

Parrot Tulips.—The PARROT TULIPS are exceedingly brilliant. The petals are long, loose and fringed. Most varieties have three or four colors, as crimson, yellow, orange and green; and the effect of such a mingling of bright colors may be imagined. Those who plant the Parrots, and are unacquainted with them, will be surprised at their gay appearance.



TULIP BULB.

Late Tulips.—Of the LATE TULIPS there are many varieties, the

distinction between each more or less clearly defined. These are the great favorites with florists the world over, and are truly magnificent, with tall, stately stems, usually eighteen inches in height, and large, well-formed, highly colored cups. The Late Tulips are divided into *Bizarres*, *Violets* and *Roses*. The *Bizarres* have yellow ground, marked with any other color. *Violets* have white ground, marked with purple and violet. *Roses* have white ground, marked or variegated with rose, scarlet, crimson or cherry. There are at least two hundred named varieties of this class, but many of these are quite similar, though all are exceedingly fine. The general appearance of the Tulip Bulb is represented above, though the varieties differ a good deal in form. A full-sized bulb, when planted in the autumn, blossoms the coming spring. The bulb planted decays, flowering but once, and gives place to one or more new bulbs, that will bloom the next spring. These may be taken up or allowed to remain in the ground. As the new bulb has no roots, removal does



DUC VAN THOL. SINGLE EARLY.

DOUBLE.

LATE SHOW

PARROT.

not injure flowering in the least, though unless replanted pretty early in the autumn, those that are allowed to remain in the ground flower a few days earlier. This is true of Hyacinths and all bulbs that are taken up and dried.

The accompanying small sketches show the habits of the different classes of Tulips when in flower. They are as correct as we can give in so small a space, though different varieties in the same class often show quite a difference in habit. Old gardeners know how to prize Tulips, and beginners should not fail to employ them, as they will so surely reward the little care required by them that it will prove a great encouragement to those making their early attempts in flower gardening. Those who try them once will not be willingly without them afterwards.

NAMED TULIPS.

DUC VAN THOL

	each	per doz
Single Red,	\$ 5	\$ 40
Rose,	6	60
Scarlet,	5	40
Yellow,	8	75
Crimson,	5	40
White, true,	10	1 00
Gold Striped,	6	50
Double Red,	5	35

TOURNESOL.

Orange and Red,	6	50
Yellow, true, fine,	8	75

SINGLE EARLY.

	each
Abbesse de St. Denis, cherry striped,	\$ 6
Admiral Florida, purple striped,	15
Alida Maria, white striped,	6
Alpherus, violet, tipped with white,	18
Artus, beautiful deep red,	5
Bacchus, deep crimson,	5
Bizard Pronkert, red and yellow,	5
Breughel, purple,	15
Bride of Haarlem, red and white,	10
Brutus, gold striped,	7
Caiman, white, striped with purple,	12
Canary Bird, yellow,	6
Chrysolora, yellow, fine,	6
Claremont Striped, red, white flaked,	6
Compte de Vergennes, white and red,	7
Couleur Cardinal, brilliant red,	7
Couleur Ponceau, crimson border, whitish ground,	5
Cramoisi Royal, splendid crimson,	8
Donna Maria, red and white,	8
Dorothea Blanche, white ground, marbled with pink,	10
Duchesse de Parma, red, edged with yellow; splendid,	5
Eleonore, purple edged with white,	5
Feu de Muscovie, yellow, striped with red,	12
Franciscus I, splendid red and yellow,	10
Globe de Rigaud, purple striped,	6
Graaf Floris, white and rose,	10
Grand Duke, red, deeply edged with yellow,	6
Grootmeester, white and crimson, striped; large,	7
Hebee, deep red and yellow, fine,	12
Hecuba, white, striped with red,	12
Hobbema Feuillemont, violet, bordered with white,	6
Joost van Vondel, rosy-red and white, one of the largest,	10
Lac Dore, purple,	18
Lac van Rijn, purple and white,	5
La Precieuse, rose and white,	8
La Reine, beautiful rosy white,	5
Marmont, red and white striped,	15
Paragon Guldebloem, violet and yellow,	7
Pax Alba, very fine white,	7
Pottebakker, white,	8
Pottebakker, scarlet,	7
Pottebakker, yellow,	7
Prince of Austria, red and yellow,	10
Proserpine, crimson; large and splendid,	12
Purple Crown, purplish crimson,	5
Queen of Violets, light violet,	6
Reine des Cerises, cherry and white,	10
Rose Brilliant, white, edged with red,	12
Rose Gris de Lin, very fine rose,	6
Samson, red,	6
Souvenir, red, yellow striped, dwarf,	5
Standard Royal, white and red striped,	6
Thomas Moore, orange,	6
Van der Neer, very fine violet,	10
Van Goijen, rose,	7
Vermilion Brilliant, glittering red,	7
Violet Blanche, white, tipped with red,	10
Wapan van Leiden, white and rose,	6
Wouwerman, dark violet,	6
White and Red Bordered, white, delicately mottled with red,	5
Yellow Prince, fine yellow,	5

DOUBLE TULIPS.

Admiral Kingsbergen, golden yellow, striped with bronze, large; late,	5
Aimable, coppery-yellow, shaded with violet; early,	10

Alexander, red, yellow striped; late,	6
Atrium, yellow striped, fine; late,	5
Blue Flag, fine blue; late,	5
Bouquet d'Orange, salmon red, with tinge of orange; late,	10
Brunello, brownish red, edged with yellow; late,	6
Comte de Pompadour, purplish-red, large; early,	10
Conqueror, white and violet striped, large; late,	6
Cafe Noir, rich, velvety, deep crimson; late,	6
Crown Imperial, violet and white; late,	10
Crown of Roses, splendid double rose, large; early,	8
Duke of York, puce and white; fine, large; early,	5
Extremite d'Or, yellow and red; early,	10
Gloria Solis, bronze, orange and crimson; early,	5
Grand Alexandre, yellow, beautifully striped with red; early,	8
Imperator rubrorum, fine red; early,	6
Incarnat Gris de Lin, copper color, striped with violet; late,	8
Incomparable, deep rose, edged with white; early,	10
La Candeur, white; fine, large, early,	5
Le Blason, fine rosy; large, early,	6
Madame Catalani, purplish rose, edged and mottled with white; late,	12
Mariage de ma Fille, pure white, striped with rose, large; late,	12
Milton, reddish purple, large; late,	5
Mina, white, striped with rose; late,	10
Morillo, light rose, early,	6
Pæony Gold, yellow and red; late,	5
Pæony Rose, scarlet; late,	5
Phœdor, splendid purple, fine; late,	10
Purple Crown, splendid dark velvety crimson; early,	5
Purple, White Bordered, early,	5
Regina Rubrorum, red, striped with creamy yellow; early,	12
Rex Rubrorum, fine scarlet; early,	5
Rhinosceros, purple, large; early,	8
Rose Eclatante, rich crimson; late,	5
Rose Hortense, white and purplish crimson, large and fine; early,	12
Salvator Rosa, rose, early,	7
Velvet Gem, brown velvet; early,	8
Violet de Paris, violet striped,	10
William Rex, purple and yellow; late,	15
Yellow Rose, beautiful golden yellow, large; late,	5
Yellow Rose, variegated foliage; late,	6
Zebra, dark, velvety red, lightly striped with yellow; late,	6
Zwinglius, deep rose; early,	20

PARROT TULIPS.

Belle Jaune, beautiful yellow,	5
Cafe Brun, rich brown,	8
Large Scarlet, large and bright,	5
Perfecta, red striped	5

Those who wish to leave the selection to us, we will supply *Duc Van Thol* Tulips at 65 cents, *Single Early* Tulips at 75 cents per dozen, *Double* at 65 cents a dozen, and *Parrots* at 60 cents a dozen.

LATE FLOWERING SHOW TULIPS.

	each	per doz
Bizarres,	5	\$ 50
Violets,	6	60
Roses,	6	60

BEDDING TULIPS.

We know of no flower that will make such a perfect and showy ribbon bed as the Tulip, properly selected for the purpose. It should be formed of three distinct colors, at least, as yellow, white and red, and not less than three rows of each color. For the purpose of encouraging this kind of planting, we have selected and imported in large quantities several varieties best adapted for the purpose.

TALL—15 inches when in flower, and flowering at the same time.

	per doz	per 100
Chrysolora, yellow, fine,	\$ 60	\$ 4 50
Duchesse de Parma, red, bordered with yellow, splendid, tall,	45	3 00
Pottebakker, white,	75	5 50
Samson, beautiful red,	60	4 50
Thomas Moore, orange,	55	4 00

LOWER — 12 inches, and flowering together, and with the five tall ones above.

Artus, deep red,	45	3 00
Lac van Rijn, violet, white bordered, very fine,	45	3 00
La Reine, white, fine,	45	3 00
Standard Royal, red and white striped, beautiful,	55	4 00
Yellow Prince, pure yellow,	50	3 50

DOUBLE — 14 inches, and flowering together, at the same time as the two above named lists.

Morillo, light rose,	50	3 60
Purple Crown, dark crimson,	45	3 00
Rex Rubrorum, scarlet,	45	3 00
Salvator Rosa, deep rose,	70	5 00

TULIPS FOR BORDERS.

Some of the low growing early Tulips are unsurpassed for bordering beds. They grow from six to ten inches in height, and when planted close together so as to make an unbroken row, the effect is delightful. The following are the most desirable varieties for this purpose:

	per doz	per 100
White and Red Bordered, fine,	50	3 50
Souvenir, red and yellow striped,	40	2 75
Duc Van Thol Double Red,	35	2 25
Duc Van Thol, Single Red,	40	2 50
Duc Van Thol, mixed varieties,	50	3 50

UNNAMED TULIPS.

The Mixed Tulips we offer are not small or inferior bulbs, but are large, and of fine varieties, and will make a showy, splendid bed, at little cost. Where it is not considered important to have the colors separate, they will give the best of satisfaction.

	per doz	per 100
Mixed Single early, splendid flowers, \$0 40	\$2 75	
Mixed Double, splendid flowers,	40	2 75
Mixed Parrot Tulips, fine flowers,	40	2 75
Bizarres, Violets and Roses, Mixed,	50	3 50

NARCISSUS.



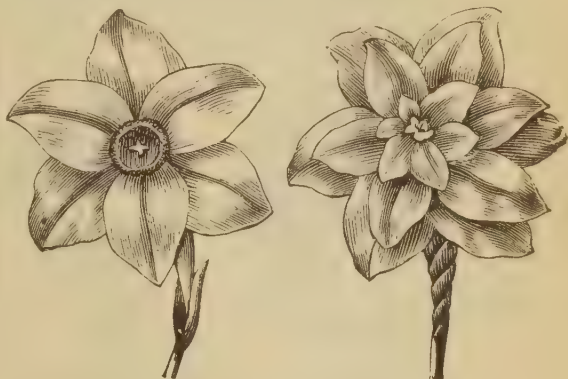
TRUMPET NARCISSUS.

POLYANTHUS NARCISSUS.

The Narcissus is a very fine genus of early-blooming flowers, including the well known Daffodil and Jonquil. Most of the varieties are hardy, and the bulbs should be planted in the autumn, like the Hyacinth, but may remain in the ground a number of years, after which they will become so matted together as to make a division of them necessary.

The Single Narcissus is extremely hardy and popular as a border flower, and the central cup being of a different color from the six petals, makes the flower exceedingly attractive. Some have the petals of a light yellow and the cup orange; others have the petals white and the cup yellow; while the Poet's Narcissus,

Narcissus poeticus, sometimes called Pheasant's Eye, is snowy white, the cup cream color, with a delicate edge of red, which gives its latter name. The Double varieties are much prized. The common Daffodil is well known under that name, though not so well by its true one, Van Sion.



SINGLE NARCISSUS.

DOUBLE NARCISSUS.

The most beautiful portion of the Narcissus family, however, is the Polyanthus Narcissus. The flowers are produced in clusters or trusses of from half a dozen to three times this number. Like the others, they show every shade of color, from the purest imaginable white to deep orange. They are not hardy in this climate, but for flowering in pots in the house they are unsurpassed, and nothing can be more satisfactory for this purpose.

The Jonquils are also desirable for winter flowering. Three or four may be grown in a small pot. Try them in the window garden; you will find nothing sweeter.

The Polyanthus Narcissus succeeds admirably in gardens where winters are not very severe, and is prized for house culture everywhere.

POLYANTHUS NARCISSUS.

	each
Bazelman Major, fine white,	\$0 50
Double Roman, white and yellow, fragrant,	15
Gloriosum superbum, white, with deep orange cup, fine,	15
Grand Monarque, white, yellow cup,	20
Grand Primo White,	20
Grand Primo Yellow, very fine,	25
Grand Soliel d'Or, bright yellow, deep orange cup, splendid,	15
Grootvorst, white,	15
Jaune Supreme, yellow,	30
Queen Victoria, white,	30
Luna, white,	15
Newton, yellow and orange, extra,	15
Paper White, pure white and very fragrant,	15
Staten General, fine lemon,	15

DOUBLE NARCISSUS.

Albo pleno odorato, white, fragrant,	6
Incomparable, fine light yellow,	6
Noblissimus, fine, new,	20
Orange Phoenix, orange and lemon,	12
Tratus Cantus, new, fine,	10
Sulphur Crown, light yellow,	20
Van Sion, (Yellow Daffodil,)	6

SINGLE NARCISSUS.

	each
Bulbocodium, or Hoop Petticoat, fine,	20
Campernel, (Great Jonquil,) yellow, fragrant; per dozen, 50 cents,	5
Etoile d'Or,	10
Poeticus, per dozen, 50 cents,	5
Trumpet, Gold,	20
Trumpet, Silver,	20

JONQUILS.

	each	per doz
Largest Double, sweet-scented,	\$0 10	\$1 00
Single, sweet-scented,	5	50

ANEMONE.

All will admit, who have ever seen the Anemone in bloom, that it is a most beautiful flower. Double and single are both desirable—the single the most brilliant. The Anemone has not been grown generally, because it has been thought too tender to bear our winters. The bulbs may be kept until spring, and if planted early will flower well. Although unable to recommend the



DOUBLE ANEMONE.



SINGLE ANEMONE.



ANEMONE ROOT.

Anemones for fall planting in the North with the same confidence we do more hardy things, they are well worthy of trial, and those who succeed will be delighted. The roots look like dried ginger. Plant them five inches apart, and cover three inches deep. They flower after the Hyacinth, and continue a long time in bloom. When the leaves begin to turn yellow, the roots may be taken up, dried in the shade, and packed away. The engravings show the flowers less than one-fourth natural size, but the root is about as it usually grows, both for form and size.

Anemone, single, brightest colors,	each	per doz
double, best mixed colors,	\$0 25	30
single scarlet,	30	25
double scarlet,	\$0 06	\$0 60

COLCHICUM.

The Colchicum, or Autumn Crocus, is a curious and interesting flower. The leaves appear in the spring, and the flowers in the autumn, and the seed the next midsummer. This singular habit makes the flower very interesting both to the botanist and florist. The bulbs are perfectly hardy, and we have never known one injured by the winter. Each bulb gives quite a cluster of flowers, generally six or eight, and so persistent is it in its determination to

flower, that if taken up early in the autumn, before time for flowering, and placed in a pot or basket, it will bloom just as well as if left in the ground. Indeed, if placed upon a bracket or shelf, without either soil or

moisture, the pretty pinkish flowers will appear just the same as though it had retained its natural position in the ground. C. autumnalis is a delicate pink; C. Agrippina of a deeper color and checkered; C. album clear white, and a very pleasing variety. A few of either variety will afford great satisfaction, and to those who have never grown the Colchicum we would say, try them, and obtain the cheapest, if money is of any particular consequence.

Autumnalis,	each
Album, white,	\$0 10
Agrippina, new and fine,	25
	40

CROCUSES.

Crocuses begin to throw up their leaves before the frost is fairly gone, and in sheltered situations in this latitude will flower in March, though early in April is their season of greatest beauty. They must be planted in the autumn. The bulbs may be set so close as almost to touch each other. After flowering, the bulbs may be taken from the ground and kept in a dry place until planting time in the autumn, or may be allowed to remain in the ground; it will make no difference, except that those that remain undisturbed will be likely to flower a week or ten days earlier.

There is but one objection to their use in the house, and that is the brief existence of the bloom. However, the Crocus is so cheap and flowers so soon after planting, that it will always prove interesting and remain popular. For general purposes the unnamed are quite as good as the named, and as they are bought at less than two cents each, cannot be considered an expensive luxury. The yellow are the most vigorous in growth.

UNNAMED, 20 cents per dozen; \$1.25 per 100.

Large Blue,	Large Striped,
Large White,	Large Yellow.

Those ordering the above by the dozen or hundred can select of one or all the varieties.

NAMED CROCUSES, 35 cents per dozen; \$2.50 per 100. Of the FINE NAMED CROCUSES, mostly new varieties, we have about thirty sorts, white, blue and striped. They are large and fine.

IRIS.

The Iris, or Flowering Flag, as it is called, or Fleur-de-lis of the French, is a well known family of hardy



border flowers. They are natives of damp spots in all four quarters of the globe, but were adopted for garden culture more than three hundred years ago. In that time they have become very much improved, and some varieties are exceedingly beautiful. I. Susiana major is five inches across, and of the richest colors and most singular markings. I. Pavonia is small, but beautifully marked, almost looking like a butterfly. This, and I. tuberosa, however, are not hardy, and are suitable for

winter flowering in the house. The others are perfectly hardy, needing scarcely ordinary care. *I. Persica* is also desirable for winter flowering. A few years ago, in almost every garden a clump of the *Iris* was to be found, but being common varieties they have been abandoned, like many of our old and meritorious flowers. It would be well now to introduce some of the improved varieties into our gardens, and we are quite sure they would afford the greatest satisfaction. The *Anglica* and *Hispanica* classes, and the *Susiana* major are especially desirable for garden culture.

	each.	dozen.
<i>Anglica</i> , mixed sorts,	\$0 05	\$0 50
<i>Germanica</i> , (common Flower de Luce) mixed sorts,	8	75
<i>Hispanica</i> , mixed varieties,		25
<i>Pavonia</i> (Peacock,) beautiful,	5	30
<i>Persica</i> , dwarf fragrant, fine,	10	1 00
<i>Susiana</i> major, brown, tinted with rose,	15	1 30
<i>Tuberosa</i> , rich velvet, marked with black,	6	60

RANUNCULUS.

The *Ranunculus* is not considered hardy generally, but with good dry soil, with drainage so that the surface water may run off easily, tolerable success may be attained. Desirable for culture in the house. The bulbs are very curious, tooth-like, and may be kept out of ground almost any length of time,



ROOT.



PLANT.

and will then grow as well as when freshly taken up. They can, therefore, be kept until the spring, and if then planted early, in a pretty cool place, like the north side of a fence or hedge, the result will be usually quite satisfactory. Our fierce summer suns are not favorable to the full development of this flower, as it delights in a cool, moist atmosphere. This fact should be remembered in house culture. No success may be looked for in a hot, dry room. This is one of those beautiful flowers that will never be common in America, which may be secured by proper culture.

	each.	doz.
<i>Ranunculus</i> , best named varieties, each, \$0 06	\$0 06	\$0 60
Best mixed varieties,		25

SCILLAS.

The *Scilla* is the brightest, and prettiest, and hardiest of the early spring flowers. When the *Crocuses* are in bloom, the little modest *S. Siberica* and *S. campanulata* may be seen throwing up a little cluster of flowers of the most intense blue imaginable. The flower stem is only about four inches, and is just the pretty flower that everybody craves for the button-hole. The plant flowers without showing a leaf. After the flowers are gone the leaves appear, and these should not be injured. Many, after the flower has disappeared, remove the leaves so as to make room for other plants, but this course in-



dures the bulbs unless the leaves are pretty well matured. No bulb is more hardy or more competent to take care of itself. The bulbs are quite small, as is also the plant, and, like all small bulbous-rooted plants, look best and are less likely to be destroyed if grown in little masses—a dozen or so in a group. When small bulbous roots are scattered over the garden singly, they are almost certain to be destroyed, especially where help in cleaning up the garden is occasionally employed.

	each.	dozen.
<i>Siberica</i> , bright intense blue,	\$0 10	\$1 00
<i>Campanulata</i> ,	10	1 00
<i>Hyacinthoides alba</i> ,	10	1 00
<i>Hyacinthoides cœrulea</i> and <i>rosea</i> ,	10	1 00

SNOW-DROP.

The first flower of spring is the delicate *Snow-Drop*, white as snow. Its appearance about the first of March is a joyful surprise. The bulbs are quite small; the leaves and flowers about six inches in height.



Plant in the fall, in beds or masses of a dozen or more, about two inches apart, and about the same depth. They are very desirable for growing in pots, etc., in the house in winter. A dozen may be planted in quite a small pot or saucer. A few planted on the lawn produces a fine effect early in

the spring, and mowing will not destroy the bulbs, for the leaves will ripen so early that they will be pretty well matured before the grass will need cutting. Perfectly hardy, and the bulbs can remain several years without removal.

The *Snow Flake*, (*Leucojum*), is sometimes called the *Large Snow-Drop*, from its resemblance to this delicate flower. It is much larger, and more robust in habit. Flowers white, with bright green spots. Once planted, it manages to take care of itself. This does not flower until later in the season. It flowers well in the house.

<i>Single Snow-Drop</i> , per doz., 30 cents; per 100, \$2 00	
<i>Double Snow-Drop</i> , . per doz., 60 cents; 100, \$4 50	
<i>Leucojum æstivum</i> , <i>Large Snow-Flake</i> , . each, 10	

IXIA.

The *Ixias* are not destitute of beauty, and few flowers attract more attention by their curious forms and strange coloring. Some of them, and, indeed, nearly all, showing three or more colors. They make a nice addition and give variety to the larger bulbs, as *Hya-*



cinths, etc., more commonly used in house culture, and seldom fail to please. Several may be planted in a

small pot, and the treatment is the same as we have recommended for other bulbs in pots. The *Ixias* are all natives of the Cape of Good Hope and portions of South Africa. Our engraving shows the form of flower and habit of plant, though there is a greater difference in the form and color of *Ixias* than with almost any other class of plants. The variety we figure is *Viridiflora*, and the prevailing color is green, the center being purple and pink, but the *Ixias* are of almost all imaginable diverse colors.

Ixias, best named varieties, each, 10 cts.; per doz., \$1.00

OXALIS.

An interesting class of small bulbs, desirable for winter-flowering in pots, producing an abundance of bloom. They should be potted as early as convenient, and in nice, sandy loam, with good drainage. Most of the va-



OXALIS IN HANGING POT.

rieties have small bulbs, and should be planted from three to five bulbs in a pot; versicolor is particularly small. When through flowering, and the foliage begins to turn yellow, let them dry off gradually. When perfectly dry, knock them out of the pots, separate, and plant in fresh soil, keeping them in a dry place. About August or September they will commence growing again. Then bring them to the light and air, and commence watering. In this way the bulbs will keep sound all summer, and will increase rapidly. The leaves, as will be seen by the engraving, resemble in form the Clover leaf; indeed, the celebrated Irish Shamrock is an *Oxalis*. As the leaves are on long, slender stalks,



OXALIS.

and consequently droop, it can be readily understood how well the *Oxalis* is adapted to hanging baskets and other similar purposes. Generally, both leaves and flowers are abundant, so that a few plants present a very cheerful aspect during the whole winter. There are varieties that will not blossom in the winter, and these are mostly desirable for borders, edgings, etc., but those described are winter-flowering kinds. Our little engraving shows a plant in bloom, but the different varieties vary very much in habit, and the plants make a more vigorous growth, and

fill a larger space than the size of the bulb would seem to indicate. The following are the very best of the winter-flowering varieties, and may be grown either in pots or hanging baskets.

	each.	dozen
<i>Oxalis Bowii</i> , bright rose,	\$0 10	\$1 00
<i>Lutea</i> , yellow,	10	1 00
<i>Multiflora</i> , white,	10	1 00
<i>Versicolor</i> , a beautiful variety; white, yellow eye, crimson outside,	10	1 00
<i>Floribunda rosea</i> , pink,	10	1 00
<i>Floribunda alba</i> , white,	10	1 00
<i>Ortgiesi</i> , a new variety from Peru, a foot or more in height, like a small tree in shape. The upper side of the leaf is a rich olive-green, the under side purple. It has not bulbous roots; flowers a good yellow,	25	

CROWN IMPERIAL.



This is one of those hardy and useful plants about which there is no mystery or difficulty. Once put in the ground, and having obtained a fair start, it will continue to grow and increase from year to year.

Although the Crown Imperial is so pretty in early spring, its fragrance is not at all desirable. The flower stem, when removed, leaves an open space in the center of the bulb, which sometimes causes those inexperienced to consider the bulb injured.

	each
<i>Maximum Red</i> ,	\$ 50
<i>Maximum Yellow</i> ,	75
<i>Red</i> , gold striped foliage,	60
<i>Double Red</i> ,	1 40
<i>Double Yellow</i> ,	1 40
<i>Red</i> ,	30

MISCELLANEOUS.

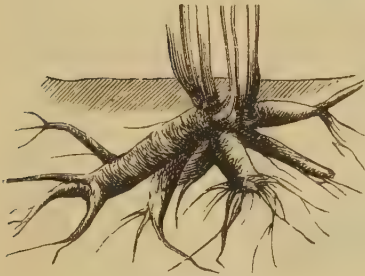
The following bulbs are suited for autumn planting in the garden, or for flowering in the house. Much is gained by planting unquestionably hardy plants in the fall, while many of the hardy bulbs can be obtained in no other way.

	each
<i>Blue Grape Hyacinth</i> , small, grape-like flowers, 10	
<i>White Grape Hyacinth</i> , like the above in form, but clear white,	25
<i>Feathered Hyacinth</i> , a very pretty feathery flower, curious and interesting,	10
<i>Gladiolus</i> can only be planted in autumn in the South and Pacific coast, where there is very little frost, and do not bloom well in the house. A full list of named sorts will be found in our Spring Catalogue and Floral Guide; mixed, doz.	50
<i>Madeira Vine</i> is an excellent climber, closely resembling the Ivy, and useful for same purposes. Foliage lighter in color and more delicate. Not hardy. Tubers,	10

CHINESE PÆONIES.



PÆONY PLANT.



PÆONY ROOT.



The Chinese Pæonies are so valuable on account of their large size, beautiful coloring, and delightful fragrance, and so entirely hardy and vigorous that we are anxious all our customers should have at least a White and a Pink Pæony. *Fragrans* is one of the best Pink varieties, but there are few exhibitions that present such a wonderful combination of colors as a bed of Pæonies. The Pæonies are perfectly hardy, never suffering injury by cold, and will succeed in any ground, unless so wet that the water will lie on the surface in the winter and spring. They may be planted either in the autumn or spring, and are transported with greater safety than almost any plant—not one in a hundred failing.

Good roots, each 25 cents; dozen \$2.50. Autumn is the best season for transplanting Pæonies.

Pæonia fragrans, one of the best pink varieties.

Double White.

Active, rose; flowers very large and compact.

amabilis lilaceus, outside petals blush, inner petals buff, center blush.

bicolor, rose, shading to white at tips of petals.

Beaute Francaise, outside rose, with a salmon center.

Congress, blush and white, with crimson markings in the center.

Comte de Paris, fine, bright rose.

centripetala, outside petals pink, second row fringed, center full.

Duchesse d'Orleans, violet rose, salmon center.

Doyen d'Engheim, crimson.

Dr. Bretonneau, rosy-violet, large.

General Bertrand, outer petals blush, center light yellow.

grandiflora nivea, rosy-purple, center salmon.

lilacina plena, pale rose, center yellow.

Lamartine, crimson.

lutea plenissima, blush.

Limbata, rose.

Pæonia Perfection, rose, inside salmon, marked with purple.

papaveriflora, white, with red markings in the center.

Pomponia, large, purplish pink, with salmon center.

striata speciosa, pale rose, center nearly white.

Triomphe du Nord, violet and rose.

unicolor grandiflora, outside petals rose, center salmon tinged with rose.

TREE PÆONY.



The Tree Pæony bears flowers in form like the common Pæony, but they are light pink or blush in color, and the plant, instead of dying down to the ground every winter, as our common herbaceous Pæonies, is a small, hard-wooded shrub, bearing its branches above the ground during the winter. They often grow four or more feet in height, and carry from fifty to one hundred large blooms, forming a round head as great in diameter as in height. They are very desirable for the lawn, being handsome plants when not in flower.

Tree Pæony, good roots, each, \$1 00

LILIES.



LILIUM HARRISII.

The Lily is a favorite flower everywhere, a Queen of Flowers, and only the Rose can dispute its claim to queenly honors. The Lily abounds everywhere, in the humid vale and on the lofty mountain top, and, truly, no earthly monarch was ever arrayed as one of these simple, yet beautiful flowers. Autumn is the most favorable time for procuring and planting Lilies, as they have perennial roots, like trees, and removal is somewhat of a check upon their growth, and it is not always that they will flower the first season after being transplanted; but the chances of flowering are much greater if planted in the fall than if removed in the spring. Autumn planting affords time before hard frost for a considerable growth of roots, and we have often removed hundreds at that time with scarcely a sign of a check to either growth or flowering.

Lilium candidum does best transplanted in August or September. This variety is very valuable for forcing, and is used extensively by florists for this purpose. The method is to plant the bulbs in six-inch pots, barely covering them with soil, then plunge them in the garden in a warm, sheltered place, and let them remain until the pots are well filled with roots, after which they may be removed to the house or conservatory, and will flower in eight or ten weeks. *Lilium Harrisii*, *L. tenuifolium* and *L. longiflorum* may also be successfully grown under the same treatment.

After long experience, we have ascertained that the following is, all things considered, the very best collection of Lilies that we can offer our customers. It not only embraces the most beautiful, but there is not one in the list difficult of culture, or that may be likely to disappoint the planter, if we except the *Auratum*, which sometimes proves a little treacherous. All the others can be grown by a child as easily as a hill of Corn, and will grow better every year as long as the planter may live, and present flowers to adorn his last resting place.



LILIUM TENUIFOLIUM.

	Each.	Doz..
Lilium auratum , the magnificent Japan		
Lily,	\$0 50	\$5 00
candidum , common white,	25	2 50
Canadense , our native Lily,	25	2 50
croceum , flowers brilliant orange color, covered with small black dots; very showy,	25	2 50
excelsum , delicate cream or buff,	1 00	10 00
Harrisii , new; The Easter Lily of Bermuda, with large, pure white, trumpet-shaped flowers, of great beauty and exquisite fragrance. This is the most valuable and popular variety in cultivation for winter blooming, many thousands being grown each season for church decoration at Easter. By starting a few bulbs at intervals of three to four weeks a succession of bloom may be had from December to May. Bulbs of this variety will be ready for shipment in August. Good, strong flowering bulbs,	30	3 00
Extra large bulbs,	50	5 00
lancifolium rubrum , white and red, a very showy variety,	25	2 50
Japonicum longiflorum , white, trumpet-shaped; 5 inches long,	25	2 50
lancifolium album , white,	50	5 00
pardalinum , one of the most desirable of the Canadense class; flowers yellow and red, spotted,	25	2 50
Speciosum album , (<i>Præcox</i>), white, tenuifolium , foliage slender and flowers brilliant scarlet. This is a little beauty, tigrinum , Tiger Lily,	40	4 00
tigrinum fl.-pl. , Double Tiger Lily,	20	2 00
Thunbergianum grandiflorum , large cluster of dark red flowers,	25	2 50
	20	2 00

GENERAL COLLECTION

OF

Winter-Flowering and Ornamental Parlor Plants,

HARDY SHRUBS, CLIMBERS, ETC.

Each season we specially prepare a large number of such plants as are best fitted for FLOWERS IN WINTER, by having them grown in pots during summer, and these we can send in same package with bulbs or seeds, when so desired. With few exceptions, they are such kinds as can be easily grown in any ordinary parlor, sitting-room, or greenhouse, where the night temperature will average 55 degrees. The following list also embraces Hardy Roses, Climbers, &c.

PLEASE TO READ THIS NOTICE BEFORE ORDERING.

The system of packing adopted is now so complete, that although we send out many packages annually to every State in the Union, it is rare to receive a complaint, while we receive hundreds of letters attesting satisfaction at the light, simple and safe method we practice, and the fine condition in which plants arrive. There is, however, always a little risk in sending plants by mail.

All Plants are sent by Express, at the expense of the purchaser, unless specially ordered otherwise, or where in our judgment the Expressage would be too costly, and we earnestly advise our customers to have their plants always sent by Express, except, perhaps, in the far West, or where the Express charges are very high, as our system of light packing makes the charges comparatively low, and they almost invariably arrive in perfect order when thus sent.

We will send plants by mail as heretofore, but more of them for the same amount can be sent by Express than by mail; for in all orders sent by Express, extra plants are always included that are of more value than the cost of expressage.

As it is much more difficult to pack a single plant, so that it will carry safely, than a larger number, we trust our customers will order accordingly. For economy and safety in packing it is best to order at least a dollar's worth of plants.

NO CHARGE FOR BOXES, BASKETS, OR PACKING.

ABUTILON.



Hard-wooded, greenhouse shrubs, blooming almost the entire year; well-adapted for house culture: also fine for bedding out in the summer; flowers bell-shaped and drooping. They are called Flowering Maples, because the leaf bears a strong resemblance to the leaf of our Sugar Maple; indeed the whole plant looks somewhat like a dwarfed Maple tree. The Abutilons are very

popular on account of their healthfulness, their cleanly habit and their constant flowering. Plants, 25 cents each. \$2.50 per dozen, except where noted.

Abutilon Boule de Neige, flowers white.

Ed Layellion, bright golden yellow.

Mesopotamicum, habit drooping, flowers scarlet and yellow.

Mesopotamicum var., variegated foliage.

Roseum, pink flowers; very free bloomer.

Royal Scarlet, bright crimson; dwarf.

Seraph, pure white; dwarf.

Santana, brownish crimson.

Sensation, new; bright orange-scarlet, beautifully veined with crimson.

Snowstorm, white; very fine.

Thompsoni variegata, leaves mottled with yellow.

New Double, Thompsoni plena. This splendid acquisition is a sport from Thompsoni var.; the foliage has retained the same variegation, but the flowers are large, full, and perfectly double; color, rich orange, shaded and streaked with crimson; 30 cents each.

ACALYPHA.

An elegant foliage-plant. The leaves are green, beautifully banded with a narrow margin of pink and white. Very desirable as a house plant for winter.

Acalypha marginata, each, 25

ACHANIA.

A greenhouse shrub, with scarlet flowers; blooms summer and winter; not subject to insects of any kind. One of the most satisfactory house plants grown.

Achania Malvaviscus, each, 25

ACHILLEA.

A low-growing, hardy perennial, with small, double white flowers. It blooms in clusters, and is very desirable for cutting, or planting in the cemetery. Valuable for forcing.

Achillea Ptarmica fl. pl., dozen, \$2.00; each, . 20

AGAPANTHUS.

The Agapanthus is a noble plant, with slightly recurved leaves. The handsome blue flowers are produced at the top of the flower-stems, that grow from three to four feet in height, often bearing from twenty to thirty flowers.

Agapanthus umbellatus variegatus, white-striped foliage. 50

AGERATUM.

Very useful plants for bedding or borders, flowering continually during the summer. By cutting back and potting in the fall they will continue to flower all winter. Per dozen, \$2.00; each, 20 cents.

Ageratum Blanche, pure white.

Cannell's Dwarf, bright lavender blue.

John Douglas, azure blue; compact habit.

White Cap, new; pure white; compact grower.

AGATHEA CELESTIS (Blue Marguerite)

A splendid plant for house culture, with pretty, daisy-like blue flowers, that have a conspicuous yellow disc. It is of easy culture, requiring a moderately cool temperature, blooms freely, and is very desirable for cutting.

Agathea Celestis, 25

AKEBIA.

Akebia quinata, a singular Japanese climber, with small, pretty foliage, and small chocolate-brown flowers; a rapid grower, 25

ALTHÆA, (Rose of Sharon.)

Hardy shrubs, blooming in the early fall, when scarcely any other tree or shrub is in flower.

Single White, 25

Double White, 25

Double Red, 25

ALYSSUM.

Pretty plants for vases, pots or baskets; flowers very fragrant. Price 20 cents each.

Alyssum Double White.

gigantea, new; improved double white.

variegata, foliage striped; single.

AMPELOPSIS.

Ampelopsis quinquefolia, or Virginia Creeper, called American Ivy and Woodbine; a very rapid grower, leaves turning to crimson in autumn. This is a native plant, and the hardiest, most rapid growing climber we have, . . . 25

Veitchii, from Japan; a most beautiful Climber, and fast becoming a great favorite; it is a splendid wall plant, clinging to the smoothest surfaces perfectly, and on this account, and the beauty of its foliage, it is entirely satisfactory to those who cultivate it, 25

AMOMUM.

Amomum meleguetta, (Cardamom), an interesting Greenhouse plant, from which is obtained the Cardamom seed of commerce; leaves broad, green, and delightfully fragrant. . . . 25

AMARYLLIS.

The Amaryllis are interesting plants, desirable for growing in pots, producing showy flowers, that are very attractive and handsome. The bulbs should be potted in a rich sandy loam, with good drainage. They require abundant moisture when growing, but at their season of rest water should be given sparingly. We have a fine stock of the varieties named below.

Amaryllis Valotta purpurea, throws up a flower stem about eighteen inches in height, bearing from four to eight brilliant purplish scarlet flowers; a fine pot plant; bulbs, each, . . . 50

Johnsoni, an elegant pot plant, with crimson flowers five inches in diameter; each petal striped with white. Flower-stalk two feet high, with clusters of three to five blooms; bulbs, each, . 1 00

Treatiae, (*Zephyranthes*), a native of Florida, known, also, as the Fairy Lily. The bulbs of this variety are very small. The flowers are solitary, on stalks about ten inches in height; good bulbs produce two to three flowers each. It is best to grow this variety in two and one-half or three-inch pots. Per dozen, \$1.00; each, 10

ANEMONE.

One of the best hardy, autumn-flowering plants we have. It is plain looking during the summer, with dark green foliage; but in the latter part of summer flower-stems appear, growing eighteen inches high, bearing from a score to a hundred flowers, continuing to improve until destroyed by frost. The flowers are about two inches in diameter. An excellent plant for cemeteries. Each 20 cents.

Anemone Japonica alba, pure white, 20

rubra, deep rose color, 20

ANTHERICUM.

An elegant house plant with dark green leaves, beautifully bordered with broad stripes of pure white; it throws up long spikes of small star-shaped flowers, which are very effective; fine for hanging baskets.

Anthericum vittatum variegatum, 25

AQUARIUM PLANTS.

We put these plants under this heading as they are especially adapted for the purpose. They are also used for Warden Cases, Ferneries, Hanging Baskets, etc.; the set for 60 cents; each 25 cents.

Aspidistra lurida, leaves 1 foot long and 3 inches wide, very effective. Fig. 2.

Cyperus alternifolius, a grass-like plant, surrounded at the top with a whorl of leaves. Fig. 1.

Reineckea carnea, a dwarf, grass-like plant, with purple flowers. Fig. 3.

AQUILEGIA.

The Aquilegias, probably better known as Columbines, have always been favorite flowers, and in good demand. They grow freely from seed, but a good many would rather pay a little more and have flowers the first season. *Aquilegia leptoceras chrysantha* is one of the most showy of the family; the plant becomes larger and stronger, and flowers more beautiful each year.

Aquilegia leptoceras chrysantha, from Arizona, flowers large, canary yellow, 25

ARISTOLOCHIA.

A rapid growing, hardy climber, attaining a height of thirty or more feet, with large leaves ten inches across, and curious, pipe-shaped yellowish brown flowers.

Aristolochia Sipo, or Dutchman's Pipe, 50

ASTILBE JAPONICA.

The Astilbe or *Spiraea Japonica* is a very pretty dwarfish plant, with handsome, glossy foliage, and delicate, feathery trusses of very small flowers that are really elegant, and exceedingly useful for all ornamental work. It is of easy culture, very hardy, and should be in every

garden, and it is the most satisfactory plant we have for cemetery purposes, as it requires no special care after being planted. It is also an excellent house plant, and one of the best to force for winter flowers.

Astilbe Japonica, (*Spiraea Japonica*), white, 30

AZALEAS.

Azaleas are popular evergreen greenhouse shrubs, grown principally for cut flowers and decorative purposes. To the florist they are very valuable, and almost indispensable. The flowers are produced in great profusion, of various colors, from pure white to dark crimson. There are also striped and double varieties. Plants should be plunged in some shady place through summer.

Azaleas, each, 50 cents to 1 00

BIGNONIA.

A hardy, strong grower, with glossy foliage, bright red trumpet-shaped flowers, three inches long; blooms in August. This plant is not only an admirable climber, but on the lawn makes a pretty bush if the tops are cut back, having the appearance of a strong, drooping shrub.

Bignonia radicans, or Trumpet Creeper, 25

BEGONIA.

This beautiful class of plants, the type of which is shown in the illustration, is deservedly popular. Their beauty of foliage, combined with graceful flowers and free-blooming qualities, make them most desirable plants. They require about the same temperature as Bouvardias, an average of seventy degrees, to bring them to perfection. As pot plants for summer or winter decorations they have but few equals. Plants, 25 cents each; \$2.50 per dozen, except where noted.

Begonia argyrostigma picta, one of the best for house culture; leaves green with white spots; flowers white. Each, 35 cents.

Dregei, white, fine.

fuchsioides, scarlet; winter flowering.

glaucophylla scandens, a drooping variety; flowers orange-scarlet.

grandiflora rosea, light pink; winter flowering.

Goury, new; white, slightly tinged with pink.

hybrida multiflora, rosy pink; winter flowering.

Massiliensis, new; pure white; fine.

miniata, flowers bright scarlet; plant fine form.

metallica, a very handsome variety, the foliage of which is dark green, with a beautiful silvery lustre; flowers pink.

Richardsonii, flowers white; leaves finely divided.

rubra, leaves dark green, flowers scarlet rose, in immense clusters; 35 cents each.

BEGONIA REX.

The Rex varieties, of which we have a dozen or more, varying in color and markings, are very effective as pot plants. Care should be taken to keep the foliage free from dust. Occasionally, the plants may be showered, but should not be exposed to the sun until the leaves are perfectly dry. 35 cents each.

Begonia argentea, center of leaf very dark metallic green, shading lighter toward the center; band very bright and silvery; edge of leaf shaded like center.

Bijou de Rougemont, center of leaf dark green, intermingled with the broad silvery band; edge of leaf dark green.

Begonia Mrs. Stuart, center of leaf dark bronze-green; band irregular; bright green border; edge of leaf dark.

Queen of Hanover, leaf silvery-white; border of a darker shade, with an occasional spot of dark green.

Rex, the old variety, center and border of the leaf dark bronze-green; band large and distinct.

Regina, center and border of leaf dark green, with fine silver spots; band bright and perfect.

Sir Colin Campbell, center of leaf small; dark green band, wide and silvery; border bronze-green.

The O'Donohue, center of leaf small, dark green; band very broad, with a greenish cast

BOUVARDIA.



This is a beautiful class of autumn and winter blooming plants deserving much attention. They are easily raised, and reward the grower with a profusion of brilliant flowers all winter. By plunging the pots in summer a vigorous growth will be ensured. "Plunging," as gardeners call it, is sinking the pot in the soil as low as the rim, so that the pot is hidden and the plant looks as though it were simply growing in the bed without any pot. They should be removed to the house or conservatory in September, before frosts, and they require more heat than Geraniums, Carnations or Abutilons. In color they vary from the purest white to the deepest scarlet; \$2.50 per dozen; 25 cents each.

Bouvardia Leiantha, dark scarlet.

Davidsonii, white.

The Bride, pink.

elegans, bright carmine; free bloomer.

sanguinea, rich crimson; free bloomer.

Brunetti, light blush.

Hogarth, light scarlet.

DOUBLE BOUVARDIA.

The Double Bouvardias are now among the most popular plants for forcing or house culture. The flowers are a trifle larger than those of the single variety, and perfectly double, each floret resembling a miniature Tuberose; per dozen, \$2.50; each, 25 cents.

Bouvardia President Garfield, double pink.

Alfred Neuner, double white.

CALYCANTHUS.

The Calycanthus, or Alspice Bush, as it is often called, is a most desirable hardy shrub. The leaves are slightly fragrant, the bark and flowers exceedingly spicy. The plant makes a bush several feet in height, is hard-wooded, the leaves large, and the flowers abundant, and of a brownish or cinnamon color.

Calycanthus floridus, (Sweet-scented Shrub), . 25

CALLA.

This is the well known Egyptian Lily, or Lily of the Nile, with large white flowers, broad foliage, and it will prosper under very adverse circumstances, if given plenty of water. It is an excellent plant for aquariums. In the spring they may be planted in the garden, and should not be encouraged to grow, but rather let them remain in a partial dormant state until autumn, when they may be taken up, potted, and removed to the house or conservatory. We have procured this season, a few hundred extra strong Calla roots, which we offer our customers.



Calla, or Egyptian Lily. Our Calla roots are grown for us in California, where the Calla is perfectly at home, and grows magnificently; Good flowering tubers, each, 25

CACTUS.

The Cactus family is interesting on account of the curious leafless growth of the plants and the beauty of the flowers; the Lobster Cactus, especially, is a great favorite.

Cactus Epiphyllum truncatum (Lobster Cactus), winter-blooming, 25

Cereus grandiflorus or Night-blooming Cereus, 25

CAMPSIDIUM.

An elegant climber, of rapid growth; fine for conservatories; foliage fern-like. It has no need of flowers, as the foliage is an ornament in itself. Do not allow the soil to become wet or sodden, as then it is apt to drop its leaves. The plant branches freely, and succeeds in any ordinary garden soil. It is also very fine for a window-box out of doors in the summer, growing much stronger than it does in the house. A very pretty plant that all people who cultivate it like.

Campsidium filicifolium, 25

CAMELLIA.



An old greenhouse shrub. Should always be grown in pots and in a cool place. Heat causes the buds to drop. Although many succeed with them in house culture, still we do not generally recommend them for the house. Summer treatment the same as for Azaleas.

Camellia Japonica. Small plants, by mail, 50 cents to \$1.50; larger, by express only, \$2.00 to 5 00

CARNATION.



The Carnation is one of the sweetest, prettiest flowers that grows, the only rival of the Rose. It is beautiful and fragrant, and gives plenty of flowers a long time. The ever-blooming varieties are admirable for winter flowers in the house, and are the main dependence of the florist for the preparation of floral ornaments in the winter. Young plants, just right for winter-blooming, 25 cents each, or \$2.00 per dozen. The following are the best winter-flowering varieties:

Carnation La Purite, carmine.

Buttercup, new; light yellow, slightly streaked with carmine; very fine; 30 cents.

Miss Joliffe, delicate pink, slightly tinged with salmon; fine.

Peter Henderson, large, pure white, very fine.

President DeGraw, pure white; very fine.

Duke of Orange, orange-yellow, striped and edged with carmine.

Scarlet Gem, new; beautiful shade of scarlet; strong grower; dwarf.

Mrs. Henderson, beautiful scarlet; very fragrant.

Hinzies White, white; flowers very large.

King of Crimsons, crimson-maroon; fine.

CALCEOLARIA.

This beautiful plant is an acquisition to any collection. It may be grown in pots or bedded out. The singular shape and novel colors of the flowers make them very attractive.

Calceolaria, (shrubby) each, 25

CENTRADENIA.

A beautiful winter flowering plant that will give good satisfaction with ordinary treatment. The foliage, as well as the flowers, is very attractive.

Centradenia rosea, flowers rosy violet, 25

COBÆA.

A popular climber; fine for window boxes and trellises in summer, and for the house in winter. A very rapid grower, often attaining a height of twenty feet.

Cobæa scandens, flowers purple, an inch and a

half across, 25

variegata, foliage beautifully variegated 40

CESTRUM.



The Cestrum is a plant of easy culture, and is seldom attacked by insects of any kind. After their blooming season, which is from October to January, they may be removed to a cool cellar to remain until spring, when they should be plunged in the open ground.

Cestrum, or Night Blooming Jasmine.

aurantiacum, orange yellow, 25

Parqui, flowers greenish white, 25

CAPE JASMINE.

A pretty evergreen shrub with double white flowers an inch and a half in diameter and very fragrant.

Cape Jasmine, (*Gardenia florida*), 30

COLEUS.

Fine assortment of the best varieties for the window garden. Per dozen, \$2.50; each, 25 cents.

CYCLAMEN.



The Cyclamen is particularly adapted for window-culture, and will give more flowers with less trouble than almost any plant we are acquainted with. The colors are usually white, tipped at the base with rosy purple. Use a small pot, and place the crown of the bulb just above the surface of the soil. Keep the plants cool until the leaves are well grown. When the flower-buds begin to rise on the foot-stalks, remove to a sunny shelf, where they will soon show bloom. Place as near the glass as possible. After the blooming season (generally two or three months,) is over, gradually withhold water.

Cyclamen Persicum, 50

CHRYSANTHEMUM.



There are few plants we offer our customers that will give better satisfaction than the Chrysanthemums. The plants we offer have been especially grown for winter-flowering, and will only require a few days growth after being received before they will gladden those around them with the beauty of their flowers. There are three classes of Chrysanthemums, the *Chinese*, bearing a large, loose, graceful flower; the *Pompon*, with small and perfectly double flowers in great abundance; and the *Japanese*, with ragged, fringe-like flowers, like Chinese, only more so. Recently, additions have been made to these classes, of which we offer the following: Anemone flowered, or quilled, and Hybrid Pompons. The flowers of the latter are beautifully and regularly scalloped. The prevailing colors are white, the different tints of yellow (and the yellow colors are exceedingly fine,) and different shades of red. The reds are not brilliant. Fine plants, good assortment of colors, 25 cents each; \$2.50 per dozen.

Chrysanthemum Bouquet Nationale, white, lemon center.

Golden Star, yellow.

Juvena, dark maroon, shaded blood-red.

La Charineuse, purple, shaded lilac and white.

Bois Rose, pearly-white, shading to light rose.

M. Brun, deep lilac; full; high center.

Laciniata, white.

Mr. W. Barr, base of petals bright crimson; partly tubular, with points of pure yellow.

Rosea superba, lilac-rose, tipped with buff; large and fine.

HYBRID POMPON.

Fimbriatum, rosy lake, suffused white; yellow center.

Toussaint L'Ouverture, rose-pink, tipped yellow; gold center.

Anais, rosy-lilac, with white shadings and gold tip.

POMPON, OR SMALL FLOWERING.

Eleonore, crimson, tipped gold.

Golden Cedo Nulli, canary yellow.

Duke Long, yellow.

Perfection, reddish-brown.

Star of Whyke, pure white.

ANEMONE FLOWERED POMPON.

Antonius, canary yellow.

Calliope, rich ruby-red; high center.

Mme. Sentir, pure white.

CHINESE, OR LARGE FLOWERING.

Chrysanthemum Aregina, purplish crimson and amaranth.

Jardin des Plantes, rich golden yellow.

Spotless, pearly white; large.

Lord Alcester, primrose color.

SINGLE.

James Y. Murkland, petals snowy-white; very long, reflexed on the outer edge; inner petals very irregular.

Mrs. Robertson, creamy white, base of petals golden-yellow.

Peter Henderson, pure lemon-yellow; flowers very large.

President Arthur, outer rays intense crimson, bright golden-yellow ring around disc.

CHRYSANTHEMUM FRUTESCENS.

This is the Paris Daisy now so fashionable and in such demand during the winter. The flowers much resemble our common field Daisy; almost constantly in bloom. Each, 20 cents.

CHRYSANTHEMUM ETOILE D'OR.

Golden Paris Daisy, similar to the above, except in color, which is beautiful golden yellow, both petals and disc. Each, 20 cents.

CLEMATIS.

No flower has more rapidly advanced in popular favor than the Clematis. Within a few years it has become the favorite climber of the world. It makes a quick, rapid growth, and produces its beautiful showy flowers in the greatest profusion. For pillars, trellises, bedding in masses, or planting about rock-work, the Clematis cannot be excelled. The large-flowering varieties are particularly desirable for these purposes. In the fall give the plants a good top dressing of well-rotted manure. The following spring spade it in carefully, mixing it well with the soil, and it will prove very beneficial to the plants.

LARGE-FLOWERING VARIETIES.

Clematis Jackmani, an English hybrid; large, intense violet-purple flowers, from 4 to 6 in. in diameter. The most showy of the hardy climbers, old plants being literally covered with flowers, 1 00.

Lanuginosa candida, flowers large, almost pure white, 5 to 6 inches in diameter, . . . 1 00.

Belle of Woking, double; new; a splendid variety, with flowers of a delicate bluish-mauve, or silver-grey, the innermost sepals having an occasional dash of reddish-lilac, . . . 1 50.

SMALL-FLOWERING VARIETIES.

Although the flowers of the varieties named below are not large, they are produced in such great profusion as to make them very showy and desirable.

coccinea, scarlet; the flowers of this variety differ in form very much from the others in our list, and look more like a bud than a blossom; when planted near, or in connection with other varieties, the contrast is very striking, . . . 50.

graveolens, a very strong, quick grower, with yellowish flowers, two inches in diameter, followed by seeds that are covered with tufts of beautiful silk-like threads, . . . 25.

Flammula, European Sweet, flowers white, small, and very sweet scented, . . . 25.

Virginiana, common Virgin's Bower, a native of rapid growth, with clusters of small, white flowers, succeeded in autumn by fruit with conspicuous feathery tails, . . . 25.

Vitalba, a very strong, rapid grower, often called Traveler's Joy. Flowers greenish white, and Almond scented, . . . 25.

CORONILLA.

A pretty flowering and beautiful foliage plant. The flowers are pea-shaped, bright yellow, and fragrant. Blooms freely during winter, and occasionally through the summer. It is a plant of easy culture and one that will give general satisfaction.

Coronilla glauca variegata, each, 25

CUPHEA.

Cuphea platycentra is a good basket plant, also an excellent plant for house in the winter; tube of flowers scarlet; lip white and black; very free blooming.

Cuphea platycentra, (Cigar Plant), each, . . . 25

CLERODENDRON.

The *Clerodendron* is one of our most beautiful plants for hot-house culture. *C. Balfouri* is a handsome greenhouse climber, with large clusters of crimson scarlet flowers, each flower encased in a bag-like calyx of pure white. When trained on a trellis the drooping panicles have a rich and elegant appearance. It can be trained as a shrub also, and makes a very showy pot plant, blooming, as it does, almost continuously in the winter. *C. Fragrans* fl. pl. is of dwarf habit, with pinkish-white flowers, double and very fragrant.

Clerodendron Balfouri, each, 25

Fragrans, fl. pl., each, 50

DAY LILY.

The *Funkia*, called the Day Lily, is a very superb autumn flower, very desirable for planting on the side of a lawn or at the edge of shrubbery. It will increase in size and beauty every year. The plant has very showy foliage, prettily veined. Flowers are of various shades, from pure white to dark blue.

Day Lily, White, (Funkia alba), 50

Japonica, light blue, with narrow foliage, . . . 20

cœrulea, dark blue, with broad, glossy foliage, 20

undulata media picta, lavender, foliage light

green, beautifully variegated with white. A

splendid plant for cemetery purposes, 50

DAISY.

Every garden, however small, should have a few plants of the Daisy. They are among the first flowers of spring, blooming almost as soon as the snow is gone. Plant in a cool, shady place, if possible. In severe winters they need a slight protection of straw or leaves.

Double Daisy, white; per dozen \$2.00; each, . . 20

Red, per dozen \$2.00; each, 20

Longfellow, new; flowers light pink, reverse of petals crimson; per dozen, \$2.00; each, . . . 20

DAPHNE.

The *Daphne Cneorum* is a beautiful little plant, growing usually not more than a foot in height, with slender, light green leaves, and almost every branch bearing upon its point a cluster of pink flowers, as fragrant as *Mignonette*. It flowers early in the spring, giving a few flowers during the summer, and blooming freely in autumn. It has proved perfectly hardy here.

Daphne Cneorum, a beautiful shrub, with heads of small pink flowers; delightfully fragrant . . 50

DRACÆNA.

Very ornamental pot plants, grown for their beauty of form and foliage. They require re-potting about three times a year to keep them in a healthy condition. The leaves should be washed with a damp sponge weekly. They are also especially adapted for use in hanging baskets, or vases, as center plants, for which purpose they are without an equal.

Dracæna terminalis, or Dragon Tree. Foliage dark crimson, marked with pink; 75 cents each.

indivisa, with narrow, grass-like foliage. 75 cents.

DICENTRA.

Dicentra spectabilis, sometimes called Bleeding Heart, bears heart-shaped, deep pink flowers, a dozen or more being borne on a graceful, drooping raceme, a foot or more in length. Excellent for the garden, and perfectly hardy everywhere, and for the house there are very few plants that will give more pleasure for so little trouble and expense.

Dicentra spectabilis, 25

DELPHINIUM, (Larkspur.)

The Perennial Delphiniums, like their relatives, the Annuals, commonly called Larkspurs, are valuable plants, and in no other way can we get such a grand and constant display of blue flowers. *Formosum* is a most brilliant dark blue, by all odds the finest blue flower known among our hardy plants. The Chinese are generally of lighter shades, from lavender to intense deep blue.

Delphinium formosum, dark blue flowers, large

and brilliant, 25

New Chinese, perfectly hardy, 25

DEUTZIA.

We can highly recommend the *Deutzias* for hardiness, good habit, the great profusion in which they produce their flowers, and in every respect as being among the most desirable hardy shrubs in cultivation. The flowers are in racemes from four to six inches in length. The first time we saw this plant in flower we thought it the prettiest shrub in existence; each, 25 cents.

Deutzia gracilis, flowers white, single, and so profuse as to cover the branches.

crenata flore-pleno, flowers double, white, with back of petals pink.

Double White, pure white, making it one of our best spring flowering shrubs.

DICTAMNUS.

The *Dictamnus Fraxinella* is a choice hardy perennial, forming a bush about two feet in height, of a very neat habit, both in foliage and flower. The flowers produced in racemes often a foot or more in length, a little odd in appearance, but very handsome and quite fragrant.

Dictamnus Fraxinella, white; each, 30

ERIANTHUS.

Erianthus Ravennæ, for general culture, is the best tall Ornamental Grass we are acquainted with. It is almost as beautiful as *Pampas Grass*, while its entire hardiness everywhere must make it popular as its merits become known. It is propagated both by seeds and division of the roots. The flower stems are often ten feet in height, and the feathery head about a foot. The roots are robust, and we have never lost one by shipping. The *Erianthus* makes a good clump for the side or back of the lawn, or among shrubbery.

Erianthus Ravennæ, mailing plants, \$2.00 per dozen; each 25

EUONYMUS.

A very handsome evergreen shrub, nearly hardy here. The leaves are dark, glossy green, richly variegated with yellow and white. It makes a very ornamental pot plant for the house, enduring the usual dry atmosphere of our rooms as well as any plant we know of. It generally grows very symmetrical, forming a miniature tree. Sometimes sports back to the original type, with pure green leaves. 25 cents.

Euonymus Japonicus aureus, with large, yellow blotch in leaf.

radicans variegata, almost or quite hardy; leaves small, with white margin.

EULALIA.

Eulalia Japonica Zebrina. This plant is unlike most variegated plants, as its stripe, or marking, is across the leaf, instead of lengthwise, which gives it a very peculiar but beautiful appearance. It grows from four to six feet high, and is very graceful in form. Being perfectly hardy, it is the more desirable, as plants will improve in size and beauty each year. For planting on a lawn as a single specimen plant, or for grouping, it is unsurpassed. In fall it bears large tassel-like plumes. These may be used as parlor ornaments, and will last for years. Each, 50

Eulalia Japonica variegata. This plant, except that the variegation of the leaf is lengthwise, is very similar in style and habit of growth to *E. Japonica zebrina*, and it forms so beautiful and striking a contrast to it as to make them very desirable companion plants; each, 25

FICUS.

The India Rubber Tree is a popular house-plant, as it succeeds well with ordinary treatment, and its large foliage and erect form are much admired. The plants require plenty of light, and should never be exposed to draughts. Sponge the leaves often, to keep them free from dust.

Ficus elastica, or Rubber Tree, with thick shining, leathery leaves, ten inches long by three wide; an excellent and showy pot plant. 75

repens, a fine creeper for greenhouse, or outside decoration in the South, 25

Parcelli, a very showy foliage plant, with large green leaves, marbled and blotched with white, 50

FERNS.

These beautiful plants are now quite generally cultivated. Some of them do exceedingly well with room culture, especially the *Pteris*; the beautiful Japanese Climbing Fern, *Lygodium scandens*; the Sword Fern, *Nephrolepis*; and the graceful *Adiantums*. All do well in ferneries or Wardian cases. In summer they should be set out of doors on the shady side of the house or fence. Shower them frequently both in summer and winter. We have many very excellent varieties of Ferns not named below; plants 25 cents each.

Lygodium scandens, a beautiful climbing Fern from Japan, growing from ten to twenty feet and succeeding admirably with common room culture. 50 cents to \$1.00 each.

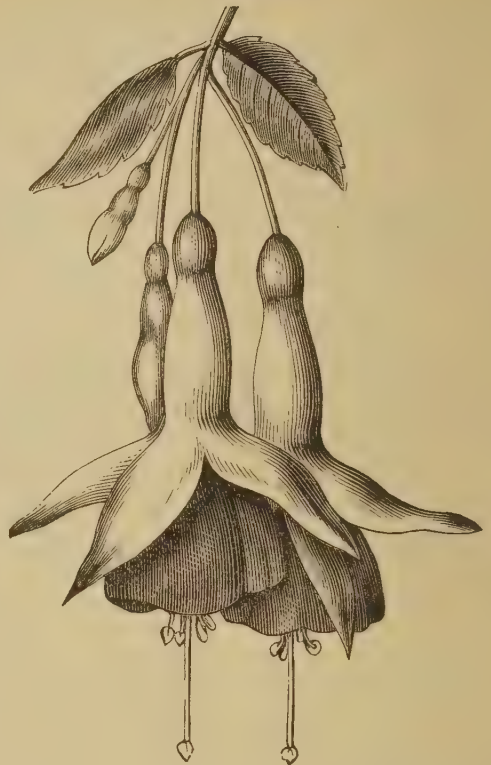
Nephrolepis exaltata, or Sword Fern, very desirable for house culture, especially for hanging baskets 50 cents each.

FEVERFEW.

The variety we offer here is one of the best in cultivation, especially for the house. The plant is of dwarf habit; the flowers are large, and pure white.

Feverfew Little Gem, per dozen, \$2.50; each, . . . 25

FUCHSIA.



The Fuchsias, as all know, are elegant flowers, delicate in coloring and exquisitely graceful in form. When in full bloom they are a most beautiful sight. The plants we offer are strong and thrifty, grown specially for summer and winter flowering, and may be trained in almost any desired form. The Fuchsia requires a light, rich soil. Sprinkle often and give plenty of light and air. The usual plan is to obtain plants, flower them in the house during winter, and then consider them useless. This is all wrong. If you have any defective spot on the north side of the house that you wish concealed during the summer, nothing will answer the purpose as beautifully as the Fuchsia. Put out the plants in early summer, sinking the pots a little deeper than the rim, and before the first frost remove the plants to the house, and they will make you glad all winter, and be ready for service in the garden again the next summer. To those unacquainted with varieties who may prefer to leave the choice to us, we will make a selection that we are quite sure will be satisfactory, for our collection is large and fine. Plants 25 cents each; \$2.25 per dozen, except where noted; or \$2.00 per dozen our selection.

SINGLE.

Fuchsia Aurora Superba, sepals salmon, corolla orange.

Beacon, sepals rose, corolla violet.

Black Prince, corolla reddish rose; sepals carmine.

Bird of Paradise, sepals crimson, corolla brilliant magenta.

Brilliant, corolla scarlet; sepals white; winter flowering.

Canary Bird, sepals scarlet; corolla dark purple; foliage golden yellow; very fine.

Carl Halt, sepals white, corolla crimson, striped with white; winter flowering.

Charming, sepals crimson, corolla violet.

Clipper, sepals carmine scarlet; corolla deep purple.

Jules Ferry, violet; sepals bright rose; flowers fine form.

Mrs. Marshall, corolla carmine; sepals white; winter flowering.

Fuchsia Magnum Bonum, sepals broad, of a brilliant red; corolla rich violet-purple.

Pearl of England, one of the best winter blooming sorts; sepals white, petals rosy scarlet.

Speciosa, scarlet; sepals blush; winter-flowering; one of the best.

Star of Wilts, tube and sepals cream color; corolla large, pinkish violet, with distinct margin of orange.

Sunray, violet and crimson; leaves beautifully variegated; 30 cents.

Wave of Life, sepals crimson, corolla violet, foliage golden-yellow.

DOUBLE.

Avalanche, Smith's, white; sepals crimson.

Deutscher Kaiser, sepals rosy crimson, corolla violet purple.

Gem, corolla large, deep violet; sepals crimson; winter flowering.

Jeannie d'Arc, tube and sepals bright scarlet; corolla pure white; dwarf.

Kingsburyana, sepals coral red, corolla white; fine vigorous grower, flowers large and showy.

Mrs. H. Cannell, white corolla; carmine sepals.

Montrose, corolla white; sepals rose.

Madame Galli Marie, corolla white; sepals crimson.

Nellie Morton, new; seedling from Miss Lucy Finnis, possessing almost the same habit of growth, color and shape, except that the corolla is not as double, which is a great advantage, as the flowers do not bear so heavily on the slender branches, thus giving the plant a much better appearance. Undoubtedly this variety will become very popular. Plants each, 50 cents.

New Mastodon, tube and sepals deep crimson; corolla rich, deep violet; flower very large.

Prince Napoleon, corolla purple; sepals waxy crimson.

Vainqueur de Puebla, corolla white, veined with rose; sepals red.

White Giant, sepals crimson; corolla white; very large flower: fine grower.

FRINGE.

A very desirable shrub, much admired for their curious fringe, or hair-like flowers that cover the whole surface of the plant. They grow from ten to twelve feet high, and are very showy. The white variety has large, glossy leaves, and produces its flowers in drooping racemes, about the time the foliage starts. The purple variety flowers later, and in erect spikes that remain on the plant all summer. This variety may be better known to many of our customers under such names as Smoke, or Mist Tree. Plants, each 25 cents.

Purple, (*Rhus cotinus*).

White, (*Chionanthus Virginica*).

GERANIUM.

We know of no plant that will give better satisfaction or is better adapted to house-culture than the Geranium. To obtain good plants for winter-flowering they should be grown in pots during the summer. This, all of our customers have not been able to do, as plants purchased in the spring were for bedding purposes. We have grown, this summer, several thousand plants in pots, that are now just ready for winter-flowering. In the house keep the plants cool, and give plenty of air. Sprinkle the leaves frequently, and keep them as free from dust as possible. All classes of Geraniums are adapted to house-culture—double, single, bronze, scented, etc. The Ivy-leaved varieties are drooping, and are especially adapted for baskets. Our new sorts have been selected with special reference to house-culture. All are 25 cents each; \$2.00 per dozen, except where noted.



SINGLE.

The single varieties are very free-flowering, and embrace almost every shade of color, from purple and scarlet to pure white.

Geranium Avenir National, scarlet lake, fine truss.

Col. Holden, rosy crimson.

Coleshill, soft scarlet, fine for early flowering.

Crimson Vesuvius, same habit as Vesuvius; color much darker.

Defenseur de Belfort, purple scarlet; fine.

Distinction, leaf green, with a narrow zone of deep black near the edge.

Gen. Grant, scarlet.

Happy Thought, leaf with a large yellowish white center and green margin; flowers magenta.

Harry King, vivid scarlet, white eye.

Jealousy, orange-scarlet, with a decided orange hue.

Leviathan, crimson-scarlet shaded vermilion, individual flowers large, and finely formed.

Mathilda, rose pink, free flowering, fine bedder.

Mrs. James Vick, white edges, pinkish center; without an equal for winter.

Mad. Racimer, rich deep crimson; large truss.

New Life, the flowers are vivid scarlet, irregularly striped with salmon and white, like a Carnation; truss good; very free flowering; sports sometimes.

Pantaloon, bright salmon, the center of each petal having a large, distinct white blotch.

Queen of the West, light scarlet.

Ralph, crimson scarlet, shaded purple, flowers large.

Snowden, dwarf white, flowers large, fine.

Sunset, bright rosy-salmon.

Sunshine, vermilion-scarlet; large, well-formed truss.

Vesuvius, a popular English variety; dwarf; fiery scarlet, and a very free bloomer.

White Clipper, white, fine bedder.

White Perfection, pure white, free bloomer.

White Tom Thumb, pure white.

White Distinction. The old Distinction was much prized for its splendid deep zone, but its flowers were never very attractive. The white variety now offered is in every way similar as regards growth and foliage; its flowers are pure white, and form a beautiful contrast with the dark zone; 50 cts.

Wood Nymph, clear pink; free blooming.

DOUBLE.

The double Geraniums have been greatly improved in the past few years. They are as easily cultivated as the single varieties. The blossoms do not shed their petals, hence they remain in flower a long time. For cut flowers they are superior to the single varieties.

Asa Gray, fine salmon.

Geranium Anna Montel, dwarf, delicate rose.

Auguste Villaume, clear bright red, fine bedder.

Acme, very rich vermilion, with beautiful velvety surface, fine bedder, free bloomer.

Bouquet, fine scarlet, shaded with rose, good bedder.

Bataclan, deep purple violet, flowers large, and with enormous trusses.

Candidissima plena, large and full, snowy white.

Crimson Gem, fine crimson, shaded scarlet.

Chieftain, carmine, upper petals shaded magenta.

Defiance, beautiful crimson; a fine bedding variety.

Emerson, flesh color, shaded salmon and deep pink.

Ernest Lauth, glowing crimson, illuminated with scarlet; immense truss.

Enchantress, clear rose; fine.

Gift, light scarlet.

George Thorpe, intense bright crimson; fine bedder.

Hoff Beach, rich amaranth-purple, truss and flowers large.

Henry Cannell, intense deep scarlet, flower quite large, truss good size, fine bedder.

James Vick, fine shade of crimson, lower petals changing to violet rose.

J. C. Rodbard, brilliant red, upper petals tinged with purple; truss large.

J. P. Kirtland, deep crimson, flushed with purple.

La Jeannette, pure white, flowers very perfect.

Mary Anderson, vermilion scarlet.

Meteor, bright crimson.

Mad. Thibaut, flowers very large, deep rose-pink, upper petals marked with white; good bedder.

M. Tisserant, bright rose, truss and flowers large.

Mary Geering, pink; fine shade.

Mina, rich, dark scarlet; flower very large and fine.

Mavourissa, deep crimson truss large.

Pocahontas, rose-pink, upper petals margined white.

Pres. Leon Simon, bright clear red, flamed salmon.

R. B. Hayes, fine deep scarlet.

Ruby Triumph, crimson-scarlet; large truss.

Victory, rose scarlet.

BRONZE.

The leaves of the Bronze Geraniums show the most beautiful shades of yellow and bronze or brownish red, the foliage being as handsome as flowers.

Bronze Prince, showy foliage; flowers salmon.

Marshal McMahon, very vigorous, scarlet.

IVY-LEAF.

This class have thick, glossy, Ivy-shaped leaves, and the plants are of a drooping habit. They are excellent for baskets, vases, and house plants. They may be trained on a trellis if desired, or if allowed to droop from a bracket, they make a very pleasing appearance.

SINGLE.

Alice Lee, leaf golden yellow, flowers crimson.

Holly Wreath, leaves light green; broad, yellowish margin; flowers rose.

La France, flowers deep violet amaranth; upper petals orange.

DOUBLE.

Anna Pfitzer, flowers large; salmon pink.

Gloire D'Orleans, crimson-magenta, fine.

Lucy Lemoine, flowers nearly white, purple veined.

Robert Fortune, bright carmine; flowers large, fine.

Dr. Broca, bright clear rose.

SILVER-LEAF—LEAVES WHITE MARGINED.

This class has marked leaves, the center being bright green and the edges silvery-white. They are elegant plants for the house in the winter, the foliage making a beautiful contrast.

Bijou.

Mountain of Snow.

Bright Star.

Silver Queen, flowers pink.

SWEET SCENTED.

The fragrant Geraniums are treasures. For making bouquets, and as a back ground for button-hole flowers they are indispensable. The leaves are beautiful as well as fragrant. Some varieties are more finely cut, as will be seen by the descriptions.

Rose.

Oakleaf.

Apple, round, light green leaf, delightfully fragrant. 30 cents each.

Dr. Livingstone, leaves finely divided.

Mrs. Taylor, flowers large; deep scarlet.

PELARGONIUMS.

These are more commonly known as Lady Washington Geraniums. The flowers are large, with deep blotches on the upper petals, and bright spots on the lower. While in bloom during the months of May and June, they are very beautiful and ornamental, either as pot plants or in the garden. Although their time of blooming is short, their great beauty while in flower makes them very desirable; 30 cents each.

HONEYSUCKLE.

The different varieties of the Honeysuckle are esteemed among the most desirable hardy climbers. Certain it is that the associations connected with the fragrant Honeysuckle will make it always popular. Among flowers none has been more written about than this, none more prized by people, prince or poet. Its common, or, rather, poetic, name is Woodbine; the botanical name is *Lonicera*, given in honor of a German botanist.

Honeysuckle, (Hall's *Halleana*), an evergreen variety from Japan; flowers pure white, changing to yellow; very fragrant, 25

Scarlet Trumpet, monthly, evergreen, or nearly so; flowers scarlet outside and yellow inside, . . . 25

Japan Golden-veined, foliage small, beautifully netted with yellow, flowers white, sweet, . . . 25

Monthly Fragrant, or **Dutch**, flowers red and pale yellow, 25

Chinese Twining, flowers nearly white, . . . 25

HELIOTROPE.

Well-known plants; grown for their exquisite fragrance. They make handsome plants when bedded out, blooming moderately through the summer, and in great profusion early in the fall. They are also very desirable for house culture, a single plant filling a whole room with perfume. Each 25 cents; \$2.50 per dozen.

Heliotrope Corymbosa, lavender.

Louise Delaux, rose, shaded with violet.

Lady Cook, dark violet.

Maculata, purple, white eye.

President Garfield, a beautiful shade of lavender.

HYDRANGEA.

Everybody knows the Hydrangea, an old pot plant, with a globular mass of flowers, and when well grown a very good thing. But all do not know that the finest addition made to our flowering-shrubs in twenty years is a hardy Hydrangea, called *Hydrangea paniculata grandiflora*. It is as hardy as a Lilac bush, a medium sized, hard-wooded shrub, bearing on the tops of the branches immense clusters of white flowers. These clusters are sometimes almost a foot in height, and about the same in width, remaining in bloom a long time.

Hydrangea paniculata grandiflora. Plants, according to size, each 25 cents to 1 00

HIBISCUS, (Chinese.)

Greenhouse shrubs, with dark glossy leaves, and large showy flowers; excellent for bedding out in summer. If grown in pots will flower well in the house during winter. Its flowers are truly gorgeous, very large and of the most brilliant colors; single or double, 25 cents each.

IVY.

For a climbing plant in the garden to do duty as a screen for an old wall or building, or to adorn either when new, it is a well-known and favorite plant. For in-door winter decoration the Ivy is unequaled, as it can be trained in any desired form, and will bear any amount of hardship and bad usage. The Ivy is not quite hardy far north, but plants that have done service in the garden all summer can be taken up in the autumn and potted for the house. In the spring, the plants can be transferred to the garden, by just sinking the pots in the earth. In the autumn they are ready for service in the house again, and better than ever.

Ivy English, the old popular variety. Plants, 25, 50 and 75 cents each.

New Silver Striped, leaves heavily bordered with pure white; fine, 50

Rhombia, leaves small, bordered with white, . . . 25

Maculata, light green, mottled with white, . . . 25

IVY, GERMAN.

These plants, which are not true Ivies, but so called, are very rapid growers, and most suitable for hanging-baskets and vases, for which they are unsurpassed.

Ivy German, or Parlor, with smooth, glossy, light green leaves; a very rapid grower, . . . 25

Cape Ivy, a variety of the above, with thick, dark green leaves 25

IBERIS.

Iberis gigantea alba, or New Hardy White Candytuft, is an excellent plant for cemetery decoration, bedding, or house culture. The flowers are about twice the size of the old species, and pure white.

Iberis gigantea alba, plants, each, 25

IMPATIENS.



Very pretty plants for pot culture that carry their flowers in a conspicuous and showy manner, and are constantly in bloom. The habit of growth and foliage somewhat resembles the Balsam.

Impatiens sultani, flowers rosy-carmine, 25
sultani alba, flowers pure white, 50

JASMINE.

The Jasmine is a favorite green-house or house plant everywhere. It is the idol of the poets and one of the sweetest flowers; 25 cents each.

Jasminum grandiflorum, foliage fine; flowers white, star-shaped, and very fragrant, blooming from November till May. Easy of culture.

revolutum, a half climbing plant with thick evergreen foliage, flowers bright yellow, very fragrant.

LILY OF THE VALLEY.



The Lily of the Valley is quite hardy. To raise the plant in perfection in the open ground, choose a partially shaded place, prepare the soil to the depth of two feet with a mixture of leafmould and sand. Set the roots about six inches apart and two inches below the surface. A good plant set in a bed prepared in this manner will bloom profusely. For the house we have what are called "pips,"

young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. Pips for winter flowering in the house we can send out in December, as they will not suffer injury from frost. For the garden we can ship either in the spring or autumn.

Lily of the Valley, very sweet and graceful; delicately hung; per dozen, 50

LAURESTINUS.

An elegant evergreen shrub for the South, and also for house culture at the North, producing all winter a profusion of white flowers. It should be grown in a moderately cool place.

Laurestinus, (*Viburnum tinus*), 25

LEMON VERBENA.

A shrubby plant, with light green, fragrant leaves, and lilac tinted flowers. An old favorite.

Lemon Verbena, (*Aloysia citrodora*), each, . . . 25

LANTANA.

The Lantana is of easy culture; its free-flowering qualities make it very desirable for the house. They can be trained in almost any desired form, and are almost continuously in bloom. The flowers are small and in clusters; 25 cents each; \$2.50 per dozen.



Lantana alba perfecta, pure white.

elegantissima, very light yellow.

Harkett's Perfection, a pink flowered variety, with fine variegated foliage.

Jacques Minot, deep yellow and lilac.

Le Patriote, deep yellow, large flowers and truss.

Pluie d'Or, semi dwarf, bright yellow, good bedder.

Schlegelii, yellow, orange and purple.

Snowball, white.

MAHERNIA. (Honey Bell.)

A fine foliated pot plant, of easy culture; bell-shaped flowers; fragrant.

Mahernia odorata, yellow, 25

MARANTA.

A beautiful ornamental-leaved plant, leaves large, with bands of dark velvety green; fine for ferneries.

Maranta zebrina, 50

MULBERRY.

A handsome, cut-leaved variety, proved to be hardy. The leaves are valuable for the silk-worm; fruit good.

Russian Mulberry, each, 25

OLEANDER.

An old-fashioned shrub grown as a pot plant, with a profusion of large flowers.

Oleander, Double Pink, the old variety, 25

OLEA.

A plant of *Olea fragrans* should be in every home. It grows with little care, and the dainty white blossoms are a constant delight, filling the rooms with exquisite fragrance. The dark and shining leaves always have a beautiful and fresh appearance. Hardy at the South.

Olea fragrans, (Fragrant Olive,) each, 25

OTHONNA.

A charming basket plant, with cylindrical leaves and pretty star-shaped yellow flowers, blooming almost constantly. Habit drooping, and should be always grown in a hanging pot, basket, or on a bracket. Its foliage is fleshy, like that of the *Mesembryanthemum*, but delicate and graceful, and makes a rapid growth, drooping several feet below the basket.

Othonna crassifolia, plants each, 25

PERENNIAL PHLOX.

The flowers of the Perennial Phlox, when the plants get strong, are immense bunches of bloom, from the purest white to crimson. Plants will keep increasing in size, and may be divided at the roots every two or three years. When in flower they are two feet or more in height. Seed does not germinate very readily, unless sown as soon as fully ripe. The Perennial Phlox is perfectly hardy. Plants are shipped with perfect safety.

Perennial Phlox, 25 cents each; \$2.50 per dozen.

Adelina Patti, dwarf; rosy-white, with crimson eye.

Albertus, bright reddish-crimson, shaded.

Comtesse de Chambourd, white, with pale pink eye.

Gen'l Brea, lavender; dwarf.

Jules Ferry, dark mauve-violet, large white eye.

La Ange de Proscrit, white, with pink eye.

La Gracieuse, white, with pink eye.

Mad. La Donette, white.

Miss Robinson, pure white.

Modesty, purple, with carmine eye.

Nightingale, rosy purple, with red eye.

Paul de Segur, white, with pink eye.

Rose of Castile, rosy-red.

Wm. Bull, lavender; large flower.

PILOGYNE.

A beautiful, rapid-growing climber; excellent for screens or verandas; in fact, for the latter it has no equal. Fine also for the house in winter. This plant, though so slender in appearance, makes a wonderful growth, forming a mass of foliage that will entirely cover a window or screen in a short time.

Pilogyne suavis, per dozen, \$2.50; each, 25

PRIMROSE, CHINESE.

Few house plants afford better satisfaction than this. It requires to be kept cool, a north window suiting it best. Care should be taken in watering that no water fall on the buds, as it causes them to rot. In the summer they can be turned out into a shady border. The plants should be divided, if wanted for the next winter, put into small pots, and kept shaded until well rooted; then, as they grow, re-pot, using a size larger pot. This is especially desirable for the double varieties, as in this way double flowers are insured, while, if the seed is sown, a goodly portion of the plants will bear single flowers. The single kinds are usually grown by sowing seed in pots or pans in June, pricking off when the plants have three rough leaves, and potting the young plants as they grow. These plants will be in flower by December, continuing all winter.

Primrose, Single White, 50 cents.

Single Pink, 50 cents.

Double White, 75 cents.

PEPEROMIA.

Small plants that are desirable for pot culture, ferneries, &c. *P. resedæflora* bears small spikes of white flowers on pink stems, on which are small velvety leaves. The flowers of *P. maculosa* are inconspicuous, but the foliage is beautiful; each 25 cents.

Peperomia resedæflora, leaves small; flowers white.

Maculosa, leaves green, striped with grayish-white.

PANCRATIUM.

With us this has proved quite interesting grown as a pot plant, and, from the peculiar shape of its flowers, has attracted much attention. It is a native of the South, where it is perfectly hardy. Flowers pure white and quite fragrant.

Pancratium rotatum, good bulbs, each, 50

PERENNIAL PEA.

The Perennial Pea is so hardy, so continuous a bloomer, so good both in flowers and foliage, and so vigorous a climber, that we advise every one to plant it. The plants grow to a height of ten feet or more, and produce their flowers in clusters, improving each year.

Perennial Pea, good roots, 25

RIVINIA.

Rivinia humilis is a beautiful little pot plant, with racemes of small white flowers, followed by scarlet berries. The plant is in fruit and flower the entire year. It is also a very pleasing and suitable plant for ferneries, the bright scarlet berries, being partly concealed by the Ferns, add much to their beauty.

Rivinia humilis, 25

ROSES.



The Rose stands, as it has stood for years, Queen of the flowers. There are but few flowers grown that are more universally admired. First of all we give the ever-blooming class, comprising the Teas, Noisettes, Chinas and Bourbons, on account of their free blooming qualities; then their exquisite fragrance and delicate colors. They are well adapted to house culture. The varieties offered are among the best in cultivation: they have been carefully grown in pots during the summer, and are in excellent condition for winter flowering. Shower the plants frequently, or sponge the leaves, to keep them free from the red spider, their worst enemy in the house. All Roses delight in a rich, generous soil.

MONTHLY ROSES.—Fine strong plants, 20 cents each; \$2.00 per dozen, except where noted, or we will send one dozen varieties of our own selection for \$1.50.

Initial letters are as follows to indicate classes: *t.* Tea; *c.* China; *b.* Bourbon; *h. t.* Hybrid Tea; *n.* Noisette.

Rose Agrippina, bright crimson. *c.*

Alba rosea, blush, rosy center. *t.*

Andre Schwartz, bright glowing scarlet, shading to rich crimson; profuse bloomer: flowers large and full; 25 cents. *t.*

Bon Silene, carmine tinted with salmon. *t.*

Comtesse Riza du Parc, bright coppery rose, tinged with soft violet crimson; large flower. *t.*

Catharine Mermet, flesh color; flowers large, buds finely formed; very fragrant; 25 cents. *t.*

Cornelia Cook, pure white, extra. 30 cents each. *t.*

Coquette de Lyon, pale yellow, flower medium size. *t.*

Douglas, rich crimson, distinct. *t.*

Duchesse de Brabant, light carmine, tinged with violet. *t.*

Duchess of Edinburgh, intense glowing crimson; very brilliant and beautiful. 30 cents each. *t.*

Gloire de Dijon, cream shaded with flesh. *t.*

Hermosa, pink. *b.*

Isabella Sprunt, canary yellow. *t.*

Jules Finger, bright rosy scarlet, beautifully shaded with crimson; flowers full and finely formed. *h. t.*

Louis Richard, coppery rose, changing to buff, shaded with carmine, center sometimes brilliant rosy crimson. *t.*

La Pactole, pale lemon. *t.*

Mad. de Vatry, rich crimson scarlet, very bright. *t.*

Marechal Niel, yellow, tea-scented. *n.*

Madame Lambard, silver bronze, changing to salmon, shaded with carmine and rose. *t.*

Marie Van Houtte, white, tinged with yellow, and shaded pale rose. *t.*

Rose Marie Guillot, white, with lemon tinge. *t.*

Niphetos, pure white; very large; extra. 30 cts. *t.*

Peerless, crimson; quite hardy. *b.*

Perle des Jardins, rich shade of yellow, very perfect in form, free grower, and very profuse bloomer; 25 cents each. *t.*

Phoenix, rosy-purple; quite hardy. *b.*

Queen of Bedders, flowers large; rich deep crimson; very double; free bloomer. 30 cents. *b.*

Reine Marie Henriette, clear cherry red; flowers borne in clusters. *t.*

Safrano, saffron-yellow. *t.*

Souvenir de la Malmaison, pale flesh; large. *b.*

Sunset. A sport from *Perle des Jardins*. The flowers are a beautiful saffron color, heavily tinted with orange. They are handsome in the bud, and on opening are full, and perfectly double; 30 cts. *t.*

The plants of the Hybrid Perpetual class are entirely hardy. The flowers are of immense size, often five to six inches in diameter, and of the most beautiful colors, from pure white to the darkest shade of crimson. Through their blooming season, in June, they give us a show of brilliant colors unequalled by any other plants. In the spring, cut back all the shoots, or stems, and they will send up new ones, which will make a very strong growth and give abundance of bloom. The following are only a few of the Hybrid Perpetual Roses we cultivate, but form a good collection. Those who leave the selection to us shall have our best efforts to serve them well.

HYBRID PERPETUAL ROSES.—25 cts. each; \$2.50 per dozen, or \$2.00 per dozen our own selection.

Rose Achilles Gonod, bright carmine, very large, full.

Alfred Colomb, cherry-red, shaded with crimson; extra fine.

Augusta Mie, delicate pink; free blooming.

Antoine Mouton, deep rose, tinged with lilac.

Anne de Diesbach, carmine, beautiful shade.

Archiduchesse D'Autriche, soft satiny-pink; full and good size; habit vigorous, very free bloomer.

Belle Normande, light rose, large and fine.

Baronne Prevost, deep rose; very large and full.

Baron de Bonstetten, beautiful dark velvety-crimson; large and fine.

Coquette des Blanches, white, with pink tinge.

Coquette des Alpes, white, occasionally tinged with pink, flowers in clusters.

Countess of Oxford, carmine red, tinged with lilac.

Comtesse de Serenye, silvery-pink, often mottled.

Climbing Jules Margottin, deep rose; flowers medium size; a splendid pillar rose.

Rose Climbing Victor Verdier, flowers medium size; bright rose, with crimson center.

Comtesse Cecile de Chabillant, satiny-pink; medium size, full, and very fragrant.

Duplessis Mornay, brilliant fiery crimson.

Dr. Marx, rosy carmine, full, extra.

Dupuy Jamain, bright cherry red, large and full.

Dr. Sewell, crimson scarlet, beautifully shaded with purple, full and finely cupped.

Ferdinand de Lesseps, purple, shaded violet.

Fontenelle, carmine-red; flowers medium size, full and double.

Gen. Washington, crimson scarlet; fine.

Gen. Jacqueminot, rich crimson-scarlet, very bright and velvety. It produces beautiful buds that are much admired and in great demand. This is, undoubtedly, the most popular Rose in cultivation.

John Hopper, bright rose, with carmine center; large and full.

Jules Margottin, deep rose; large and fine.

Louis Bonaparte, fine deep rose.

La France, silvery-rose changing to pink; a most constant bloomer; very fragrant; beautiful both in flower and bud.

La Reine, deep rosy-lilac; free flowering, fine.

Lord Macauley, scarlet crimson.

Louis Van Houtte, crimson and maroon; large.

Leopold Hausburg, large, bright crimson.

Louis Odier, bright rose; medium size; well formed.

Magna Charta, pink, suffused with rose; large, full.

Madame Plantier, (Hyb. China,) summer bloomer; pure white.

Mad. Nachury, dark rose; fine flower.

Mad. Marie Finger, light rose, darker in the center; globular form, large.

Mad. Marie Bianchi, lilac, shaded lighter in the center, outside of petals nearly white; globular-shaped flowers, very sweet.

Mad. Clert, clear pink; fine.

Madame Plantier, (Hyb. China,) summer bloomer; pure white.

Mad. Nachury, dark rose; fine flower.

Madame Alfred de Rougemont, pure white, delicately shaded and tinted with blush; very sweet.

Paul Neyron, deep rose; very large.

Prince Camille de Rohan, rich, dark velvety crimson, shading to maroon; very double and sweet.

Perfection des Blanches, pure snowy white; free bloomer; flowers large and very fragrant.

Pæonia, bright clear red, very sweet; one of the finest old varieties.

Paul Ricaut, bright crimson.

Paul Verdier, fine bright rose.

Souvenir du Comte de Cavour, bright crimson, shaded.

Souvenir de Ducher, rich, deep crimson; compact.

Thomas Mills, bright rosy carmine; large, cupped.

Victor Verdier, bright rose, crimson center.

MOSS ROSES.—25 cents each; \$2.50 per dozen.

Moss Roses are very popular and much admired for their buds, which are covered with a moss-like texture. They are perfectly hardy.

Aphelis purpurea, violet purple; large and full; very double and fragrant.

Alice Leroy, rosy lilac.

Boursier de la Riviere, deep red.

Comtesse de Murinais, pale flesh, changing to white.

Duchesse d'Istrie, bright red; fine form.

Eliz. Rowe, light rose.

Henry Martin, dark rose color.

Mrs. Wood, deep red, tinged with purple.

Mad. de la Rochelambert, fine, clear rose.

Mad. Alboni, clear pink, changing to blush.

Princess Adelaide, pink, blooming in clusters, often called "Climbing Moss."

Rose Raphael, pinkish white.

Salet, bright rosy-red.

White Perpetual, white.

CLIMBING ROSES.—30 cents each. Climbing Roses are perfectly hardy, blooming early in the summer, and when in a rich soil soon cover any arbor or porch.

Baltimore Belle, pale blush; nearly white.

Greville, or **Seven Sisters**, blush and crimson.

Queen of the Prairies, rosy-red; one of the best.

POLYANTHA ROSES.



This class is a distinct one. For many purposes its varieties are excellent. They are continuously in bloom; desirable for house culture. The flowers are produced in clusters, and, although not large, are very perfect and handsomely formed. Splendid for cutting. Each, 30 cts.

Little White Pet. This is one of the best. The flowers, on opening, are very light pink or blush, but change to pure white.

M'lle Cecile Brunner, salmon-pink, deeper in the center; flowers small, a beautiful miniature Rose.

Mignonette, rose, changing to blush; clusters very large; flowers small and delicate.

Paquerette, pure white, full and prettily formed.

RHYNCHOSPERMUM.

A handsome climber, with white Jasmine-like flowers that are very fragrant and produced freely during the spring months. Plants for house or window garden culture may be trained on a small trellis. The flowers are handsome and very desirable for bouquets, etc. Each 30 cents.

Rhynchospermum jasminoides, with plain green foliage.

SMILAX.

A popular and well-known climber with beautiful foliage of a dark glossy green, used largely with cut flowers, particularly wreaths, &c. An excellent plant for parlor or window culture. 20 cents each.

SALVIA, (Flowering Sage.)

No plant grown gives us such a brilliant display of flowers in the autumn as the Salvia. Splendid for pot culture in the house. 25 cents each, except where noted.

Salvia Bruantii, dwarf; flowers large; rich dark red, splendors, the old scarlet variety.

Mrs. Stevens, this variety is identical with *Salvia splendors*, except the color, which is deep crimson.

marmorata nana, of neat dwarf habit; flowers alternately marked scarlet and white.

rosea, small flower, bright pink.

SNOWBALL.

A well-known shrub, producing large, round clusters of snow-white flowers in May.

Snowball, (*Viburnum opulus*), each, 25

SPIRÆA.

This hardy shrub blooms in May. Flowers double, pure white, literally covering the branches.

Spiræa prunifolia, (*Bridal Wreath*), each, . . . 25

SOLANUM.

The Solanums are mostly nice compact plants, and desirable on account of their fine scarlet fruit which remain on the plant a long time. 25 cents each.

Solanum capsicastrum, (*Jerusalem Cherry*), with bright red berries, which hang on all winter.

capsicastrum var., a variegated-leaved variety.

jasminoides, a beautiful climber for the house in winter; requiring but little care.

jasminoides variegata, foliage, beautifully marked with white

THRIFT.

Thrift, known also as Sea Pink, and the true name of which is *Armeria vulgaris*, is a hardy little evergreen plant, with masses of narrow, dark green leaves, and bearing clusters of pink flowers in early summer. It will endure the winters of most Northern climates, and is the best hardy border plant we have yet found. It also makes a very good pot plant for winter.

Thrift, plants, each, 15 cents; per dozen, . . . \$1 50

TRADESCANTIA.

The following varieties of *Tradescantia* (often called *Wandering Jew*), have beautifully marked foliage, and are fine for hanging baskets and vases, or for house culture, as they will endure almost any hardship, if liberally supplied with water.

Tradescantia zebrina, leaves dark green, with a silvery stripe. 25 cents.

multicolor, beautifully striped with white, crimson, and olive green; sometimes sports. 30 cents each.

TRITOMA.

The *Tritoma* flowers late in the summer, usually commencing in August, and continuing till winter, and is adapted for large beds or groups, the many flame-colored racemes forming a stately object. The flower stems grow from four to five feet in height, surmounted by a spike of curious red and orange flowers, a foot in length. The *Tritoma* is almost hardy anywhere, but far North, for safety, store the plants in a pit or cellar in winter. We have known them to keep well in Central New York, for five years in the garden, but it is not safe.

Tritoma Uvaria, roots, each, 25

VIOLET.

The little, sweet-scented Double Violet is perfectly hardy, and flowers freely very early in the spring. Plants may be set out either in the spring or autumn, and can be increased by division when they attain a large size. Flowers well in the house, if not kept too hot and dry. Plants, 20 cents each; \$2.00 per dozen, except where noted.

Violet Neapolitan, light blue.

Double White.

Marie Louise, light blue, but darker than the Neapolitan. Very fine, indeed, blooming profusely early in spring, and late in fall. Easy to force in winter.

Belle de Chatenay, double, white; flowers large.

Swanley White, new. This is a sport from Marie Louise, blooming as freely, and equally good for forcing. The flowers are large, pure white, and very fragrant. Each 30 cents.

VINCA.

A drooping plant; much used in vases or baskets. They are among the best and hardiest of our small plants for the purposes designated. 25 cents each.

Vinca (*Periwinkle*), **Harrisonii**, center of leaves marked with light green.

major variegata, a very rapid grower; leaves glossy green margined with white.

WISTARIA.

The *Wistarias* are strong and rapid growers, desirable for trellises, porches, etc. When well established they grow twenty feet or more in one season. The flowers are in long racemes, and are produced very freely. A large plant in bloom is a most gorgeous sight.

Wistaria Sinensis, Chinese *Wistaria*, flowers

light purple; each, 50

WAX PLANT.

Wax Plant, (*Hoya carnosa*), a greenhouse climber, with thick, glossy leaves, and umbels of flesh-colored flowers. 25

WEIGELA.

A beautiful shrub that blossoms in June and July. The flowers are produced in so great profusion as almost entirely to hide the foliage. They are very desirable for the border, or for grouping, and also as specimen plants for the lawn.

Weigela Desboisii, 25

rosea, 25

variegata, foliage beautifully variegated, . . . 30

Large plants of *Desboisii* and *rosea* by Express, 50 cents each, purchaser to pay Express charges.

YUCCA.

The *Yuccas* are erect and noble plants, with long, narrow, strong, sharp-pointed leaves, with a peculiar tropical aspect. *Filamentosa*, shown in the engraving, is the hardiest, and will endure the winter in most parts of the country. It sends up a strong flower stem in the middle of the summer, bearing a large spike of whitish flowers.

Yucca filamentosa, strong 1 year old roots, 30

cents; strong 2 year old roots, 60

Seeds of *Yucca*, per packet, 20

PLANTS AND BULBS IN \$1.00 COLLECTIONS.

BY MAIL, POSTAGE PAID BY US.

These collections we offer for the benefit of our retail trade, and pride ourselves on our success in giving perfect satisfaction in the past. Each plant is well grown, carefully labeled, and in good, thrifty condition. We will send one-half of any two Collections at the same price as one. In all cases the selection of varieties must be left with us.

8 Abutilons,	\$1 00
8 Ageratums,	1 00
8 Begonias,	1 00
8 Carnations, Monthly,	1 00
8 Chrysanthemums,	1 00

8 Desirable Plants for house culture,	\$1 00
8 Fuchsias,	1 00
6 Hydrangeas,	1 00
8 Roses, Monthly,	1 00
8 Roses, Hybrid Perpetual,	1 00
6 Roses, Climbing,	1 00
8 Perennials, assorted,	1 00
8 Perennial Phlox,	1 00
6 Pæonies,	1 00
8 Salvias,	1 00
6 Hardy Shrubs and Climbers,	1 00

If those ordering prefer to have them sent by Express, and pay the charges, we will furnish any THREE of the above Collections for \$2.00, and any five for \$3.00.

SMALL FRUITS.

We pack plants carefully, and guarantee their safe arrival to destination, after which our responsibility ceases. All plants will be sent by Express, at the expense of the purchaser, except as noted.

STRAWBERRIES.

For field culture, plant in rows four feet apart, with the plants one foot apart in the row. For garden culture, plant three by one foot. Should the ground not be prepared for planting, on receipt of plants, they should be carefully heeled in, in a cool, moist, shady place. Do not sprinkle the foliage, as it causes a moisture to collect, which is very injurious to the crowns, causing them to rot. In setting the plants, be careful to have the crown even with, or a little above, the surface of the ground, and to have the trench, or hole, in which the plant is to be set, deep enough to allow the roots their full length. Some varieties of Strawberries have pistillate or imperfect flowers. These must have perfect-flowered varieties planted every fifteen or twenty feet among them or they will produce imperfect fruit. The pistillate varieties are marked with the letter P.

At dozen prices we prepay postage; at 100 rates add 50 cents per 100 for mailing, if wished by mail.

Stawberry Crescent Seedling, (P) bright scarlet, strong grower, exceedingly productive; ripens early and lasts a long time; dozen 30 cents; hundred, \$1.00; thousand, \$5 00

James Vick, fruit medium size, bright scarlet turning to crimson, and borne on long, stout stems, that keep the larger portion of the fruit clear from the ground. It is a heavy yielder; the color is the most desirable that a Strawberry can have for marketing, and the fruit may be allowed to remain on the vines a week after it is ripe without the slightest injury. In the home garden this is advantageous, as there are many times when it is not convenient to pick berries as soon as ripe; dozen, 30 cents; hundred, \$1.00; thousand, 5 00

Manchester, (P) medium to late; average size large; of a bright scarlet color, good quality and very productive; dozen 30 cents; hundred \$1.00; thousand, 5 00

Sharpless, medium to late; of extraordinary size; clear light red, with a smooth shining surface; irregular in form; very vigorous, productive and of the finest quality; dozen 30 cents; hundred \$1.00; thousand, 5 00

Wilson's Albany, early; this is undoubtedly the most popular Strawberry in cultivation, and too well known to need any description; it is still a great favorite, and will be for many years to come; dozen 30 cents; hundred \$1.00; thousand, 5 00

RASPBERRIES — Red.

If by mail, add 20 cents per dozen.

For field culture plant in rows five feet apart, with plants three and a half feet in the row, except Cap varieties, which should be six feet by three and a half

feet. For garden culture they may be set three feet apart each way, with Caps four feet by three feet.

Raspberry Brandywine, very popular as a market variety on account of its high color and firmness; doz., 75 cents; hundred \$2.00; thousand, 12 00.

Cuthbert, a most valuable late variety for home use or marketing; large, firm, and of superior quality; very productive; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Herstine, early; very bright red; moderately firm, and of high, rich flavor; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Hansell, new; very early; fruit medium to large, bright crimson, firm, and of excellent quality; a strong, vigorous grower, very productive and hardy; dozen \$1.00; hundred, \$3; thousand, 25 00.

Marlboro, new; fruit very large; firm; a beautiful scarlet color; ripens early, and continues in good bearing a long time. The plant is a strong, vigorous grower, and thus far has proved perfectly hardy; each 15 cents; dozen, \$1.00; hundred, \$3.00; thousand, 25 00.

Rancocas, a promising new variety, ripening a few days later than the Hansell, but more vigorous and productive than that variety; the fruit is a bright crimson color, very firm, and of good quality; each 30 cts.; dozen \$3.00; hundred, 15 00.

Shaffer's Colossal, medium to late; fruit very large; quite dark, but of excellent quality; hardy and very prolific; dozen \$1.00; hundred \$3.00; thousand, 25 00.

Turner, early; dark red; moderately firm, of fine quality; very productive, and very hardy; dozen 75 cents; hundred \$2.00; thousand, 12 00.

RASPBERRIES — Black.

Doolittle's Improved, early; medium size; very hardy and prolific; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Gregg, very large; of excellent quality; wonderfully productive, and very hardy; medium early; dozen, 75 cents; hundred, \$2.00; thousand, \$12 00.

Mammoth Cluster, large; of fine quality; strong grower, and very productive; an excellent variety for general culture; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Ohio, fruit large, of fine quality, and considered the best of the Cap varieties for drying purposes. It is a strong grower, hardy and very productive; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Davidson's Thornless, early; medium size, and very sweet; dozen 75 cents; hundred \$2.00; thousand, 12 00.

Raspberry Souhegan, new; the earliest of this class; fruit a shining jet black, large, and of fine quality; very hardy and productive; dozen, \$1.00; hundred, \$2.50; thousand, . . \$15.00

RASPBERRIES—Yellow.

Caroline, very hardy and prolific; fruit medium to large, of fine quality; dozen \$1.00; hundred, \$2.50; thousand, 20 00

Brinckle's Orange, this variety is not quite as hardy as the Caroline; the fruit is of a much brighter color and finer quality; dozen \$2.00; hundred, 8 00

BLACKBERRIES.

If by mail, add 25 cents per dozen.

For field culture, plant in rows six feet apart, with plants three feet apart in the row. For garden culture, five feet by four feet.

	dozen	100	1000
Blackberries Early Harvest , new; very early; and productive; a valuable variety for marketing, \$1	50	\$5 00	\$40 00
Snyder , the hardiest,	75	3 50	20 00
Kittatinny , needs protection north of New York city,	75	2 50	15 00
Wilson , early and very hardy,	75	2 50	15 00
Wachusett Thornless , hardy, and almost free from thorns,	1 00	4 00	30 00
Early Cluster , new; fruit; large; quite firm, and of good quality; very productive; each, 25 cents,	3 00		
Wilson Junior . This variety descended from the Wilson's Early, and gives promise of outdoing that venerable variety in yield, quality, and size of fruit; each, 25 cents,	3 00		

CURRENTS.

Plant in rows four feet apart, with plants three feet apart in the row. By mail, add 25 cents per dozen.

Current Fay's New Prolific , red; a seedling from the Cherry Currant; fruit large; plant very productive; 1 year plants, each, 75 cents; dozen, \$7.50; 2 year plants, each, \$1; dozen, \$10 00			
Cherry , red; fruit extra large; 1 year plants, dozen 75 cents; hundred,	5 00		
White Grape , the best white variety; very productive; 1 year, dozen 75 cents; hundred,	5 00		
Red Grape , strong grower; fruit medium size; 1 year, dozen 75 cents; hundred,	5 00		
Black Champion , a new English variety; the fruit is very large, handsome, and highly flavored; 1 year, each	1 00		
Black Naples , an old but good variety; 1 year, dozen 75 cents; hundred,	5 00		
Lee's Prolific , new; about ten days earlier than Black Naples; 1 year, dozen \$1.00; hundred, 6 00			
Prince Albert , light red; valued for its late ripening; fruit large; dozen, 75 cents; hundred,	5 00		

GRAPES—NEW VARIETIES.

Grape Amber Queen, very early, hardy, strong grower; ripens in August; fruit of excellent quality; amber color, but turns darker if allowed to remain on the vine; 1 year, each 50

Grape Duchess, bunch medium to large, handsomely formed, shouldered, very compact; of a greenish white color; skin thin, flesh tender, without pulp and of the finest quality; 1 year vines, each, 50 cents; 2 year, \$0 75

Empire State, bunches large, from six to ten inches long, shouldered; berry medium size; roundish oval; color white, with a light tinge of yellow, covered with a thick white bloom; flesh tender, sweet, rich, and sprightly; the vine is a strong, vigorous grower, and very productive; strong 1 year vines, each, 2 00

Golden Pocklington, beautiful light golden yellow with a fine bloom; bunches large, sometimes shouldered; berries round, very large, thickly set on the bunch, to which they cling very firmly; in quality it is unsurpassed, being of a rich, pleasant sweet flavor; 1 year, 30 cents; 2 year, 50

Prentiss, bunch large, seldom shouldered; berry medium to large; yellowish green, with a rosy tint when exposed to the sun; firm; flesh tender, sweet; 1 year 50 cents; 2 year, 75

Poughkeepsie Red, new. This and the Ulster Prolific have been exhibited at most all of our State, and many of the County, Fairs for several years past, and undoubtedly many of our customers are well acquainted with them. This variety is a cross of the Delaware and Iona; in quality it can hardly be surpassed. The bunches are larger than those of the Delaware and it is said to succeed where the Delaware will not; strong 1 year vines, each, \$1.50; 2 year vines, each, 2 00

Ulster Prolific, new; fruit handsome and of excellent quality; a vigorous, healthy grower, and very productive; color coppery-red. This variety is a cross of the Catawba and a wild Grape; strong 1 year vines, each, \$1.50; 2 year vines, each, 2 00

Vergennes, bunch and berries large; of a light red color; clings firmly to the stem; flavor rich and sweet; ripens very early, and is an excellent keeper; 1 year 60 cents; 2 year, 80

OLDER SORTS.

Add 25 cts. per doz. by mail for 1 year; 50 cts. for 2 yrs.

	1 yr. each.	doz.	2 yr. each.	doz.
Agawam , (Rogers' 15,)	\$0 25	\$2 50	\$0 35	\$3 50
Brighton ,	30	3 00	40	4 00
Champion , very early,	25	2 50	35	3 50
Concord ,	25	2 50	35	3 50
Delaware ,			25	2 50
Lady ,	30	3 00	40	4 00
Merrimack , (Rogers' 19,)	25	2 50	35	3 50
Moore's Early ,	40	4 00	60	6 00
Salem , (Rogers' 22,)	25	2 50	35	3 50
Wilder , (Rogers' 4,)	25	2 50	35	3 50
Worden ,	30	3 00	40	4 00

GOOSEBERRIES.

Gooseberries thrive best if planted where they will receive a partial shade. Plant the same distance as Currants. Add 25 cents per dozen by mail.

Industry, a new foreign variety that promises to be a valuable acquisition. The fruit is large, dark red, with a rich, pleasant flavor. It has been grown in this locality the past three years, giving the best of satisfaction; an immense yielder, and has shown no signs of mildew; each 50 cents; per dozen, 5 00

Downing's, greenish white; doz. \$1.50; hundred, 10 00

Smith's, large; light green; doz. \$1.25; hundred, . 8 00

Golden Drop, fruit golden yellow; large, and of excellent quality; each 25 cents; dozen, \$2.50; hundred, 16 00

SEEDS FOR FALL PLANTING.

Many of our Hardy Annuals and Perennials do the best if sown in the autumn. The Perennials should be sown so early as to make a fair growth before winter sets in. Then they will flower the next summer. If plants are very weak they will not always bear the winter. The Hardy Annuals generally do best sown rather late, so that the seed will remain in the ground and be ready to start at the first approach of spring. Some kinds thrive in the cold, wet weather of spring, that would almost refuse to grow when the season is more advanced. The soil for seeds or plants during the winter season should be dry. Varieties marked with a * require planting early enough to secure plants for autumn—say about middle of September. The others may be sown any time before winter sets in. Our friends in the Southern States will find it to their interest to sow all Hardy and Half-hardy Annuals in the autumn.

	pkt.	cts.
Alyssum Sweet,	\$o	5
*Antirrhinum, (Snapdragon,)	5	5
*Aquilegia,	5	5
*Campanula, (Canterbury Bell,) single mixed,	5	5
Candytuft, white, the most hardy,	5	5
Centaurea, mixed varieties,	5	5
Clarkia, single and double, each,	5	5
Collinsia, mixed,	5	5
*Dianthus Chinensis, mixed varieties,	5	5
*Digitalis, mixed,	5	5
*Hollyhock, mixed colors,	10	5
Larkspur, Rocket, tall and dwarf,	5	5
Larkspur, Perennial, (Formosum,)	10	5
Larkspur, Perennial, new varieties mixed,	5	5
Lupinus, mixed varieties,	5	5
*Lychnis Chalcedonica,	5	5
*Lychnis flore-albo,	5	5
* Haageana,	10	5
* Haageana hybrida,	10	5

	pkt.	cts.
*Lychnis grandiflora gigantea,	\$o	10
Mignonette, Sweet,	5	5
Parson's New White,	5	5
ameliorata grandiflora,	5	5
Miles' Hybrid Spiral,	10	5
Myosotis alpestris, blue,	10	5
Myosotis alpestris, white,	10	5
Myosotis Azorica,	15	5
Myosotis palustris,	10	5
Nemophila, mixed colors,	5	5
Nigella Damascena,	5	5
*Pansy, mixed or separate colors, each,	15	5
*Poppy, Perennial, (Orientale,)	5	5
Portulaca, on sandy soil,	5	5
*Scabiosa,	5	5
Sweet Pea,	5	5
*Sweet Rocket, White,	5	5
* Purple,	5	5
*Sweet William Perfection,	5	5

THE ONION FAMILY FOR FALL PLANTING.

Garlic Sets, per lb.	50
Onion Sets, per quart, by mail,	60
Price per bushel on application	
Chives, per bunch,	25
Rhubarb, roots, each, 25 cents; per dozen,	2 50

ASPARAGUS ROOTS AND HORSE RADISH.

Conover's Colossal, 1 year, by mail, prepaid, per dozen, 30 cents; per 100	1 50
2 years, by mail, prepaid, per dozen, 50 cts.; 100, 3 50	
2 years, by express, not paid, per 100	1 50
Not less than 50 roots at 100 rates	
Horse Radish Sets, per 100, \$1.00; per dozen,	25

GRASSES AND CLOVER.

At the price per bushel and peck we deliver to Express Company here or on board cars. No charge for bags or packing. By the quart we prepay postage.

Kentucky Blue Grass, (<i>Poa pratensis</i>), clean seed; per bushel, \$1.75; 2 bushels or over \$1.50 per bushel; per peck, 50 cents; per quart,	20
Orchard Grass, (<i>Dactylis glomerata</i>), per bushel, \$3.00; 2 bush. or over, \$2.75 per bush.; per peck, 85 cts.; quart,	25
Red Top, (<i>Agrostis vulgaris</i>), per bushel, \$1.25; 2 bush. or over \$1.00 per bushel; peck, 40 cts.; quart,	20
Lawn Grass, fine prepared; per bushel, \$2.75; two bushels or over \$2.50 per bushel; per peck, 85 cents; per quart,	20

Sweet Vernal Grass, (<i>Anthoxanthum odoratum</i>), per lb., 75 cents; per oz.,	10
Clover, White, per oz. by mail, 10 cents; per lb. by mail, 75 cents; per 100 lbs., delivered to railroad here,	35 00
Lucerne, (California Alfalfa), lb., by mail, 50 cents; 100 lbs., delivered here,	25 00

GRASS SEED IN BULK, BY MAIL.

To places that cannot be reached by Express we will send Grass Seed in bulk by mail, and prepay postage, at the following prices:

	peck.	bush..
Blue Grass, post-paid,	\$1 15	4 50
Orchard Grass, "	1 40	5 60
Red Top, "	1 00	4 00
Lawn Grass, "	1 40	5 50

DRY FLOWERS AND GRASSES.

All articles, except those marked with a *, sent by mail or express, free. A liberal discount allowed when ordered in large quantities for Churches and Charitable Fairs. Goods marked with a * can be sent only by Express, and at expense of purchaser.

Acrocliniums, white or rose, per 100,	\$o 25
Ammobiums, pure white, per 100,	20
Cape Flowers, white, per dozen,	20
Cape Flowers, colored, per dozen,	25
Gypsophila paniculata, 1/2 ounce,	10
Helichrysums, white or mixed colors, per 100,	35
Rhodanthes, white or rose, per 100,	25
Statice inc. hyb., fine white with rose eye; 2 ozs.,	25
Xeranthemums, double, white, or dyed rose, purple, yellow, green, or orange, per 100,	25
French Immortelles, original bunches of sixty to one hundred stems,	
White, blue, green, purple, rose, yellow, safflower, fire-orange and scarlet, separate or mixed, per bunch, 60 cents; 1/2 bunch,	35
Collection of Everlasting Flowers, a few of each variety,	50

PAMPAS PLUMES.

Fine plumes, two and one-half to three feet in length, natural creamy white or colored, scarlet, pink, purple, green, or yellow. Sent only by express at expense of purchaser.

Each, natural white, . \$o 25 Each, colored, . . \$o 35	
Sea Oats, per dozen stems, natural,	20
Dozen stems, assorted colors,	30
Per lb., natural color,	75
Per lb., assorted colors,	1 25

Straw and Willow Baskets, &c.—Illustrated Price List of Straw and Willow Baskets, Wire Forms, Everlasting Flowers, Natural and Dyed Grasses, Florists' supplies, etc., sent on application.

Fairy Flowers, or prepared Milkweed Balls, each 10 cents; per dozen,	1 00
Sheaves of Wheat or Oats,	\$1 50 and \$2 00
Wheat or Oats, per lb., \$1 50; per oz.,	15
Bouquets of Everlasting Flowers.	
Round, No. 1, 5 in., \$o 35	Pyramidal, 7 in., . 1 00
No. 2, 7 inch, 75	9 inches high, . . . 1 50
No. 3, 9 inch, 1 25	*12 inches high, . . \$2 00
Grass Bouquets.	
No. 0, \$o 25	No. 3, 90
No. 1, 35	No. 4, 1 15
No. 2, 60	No. 5, 1 50
Lycopodium, fresh, per lb., 35 cents, postage included; per barrel, on board cars,	4 00
Lycopodium, dyed a beautiful shade of green, per lb., postage paid,	1 00
Hartford Ferns, pressed, per doz.,	75
French Moss, dyed green, per package,	25
Tin Foil, per pound,	50
Wreaths in white and green, or colors.—8 inches in diameter, \$1.25; *10 inches,	1 25
*12 inches in diameter, \$1.50; *15 inches,	2 00
Crosses in White and Green, or colors.—9 inches long, \$1.25; *10 inches,	1 25
*12 inches long, \$1.50; *15 inches,	2 00
Above on wire frame, 50 cents extra.	
Immortelle Letters.—3 in. long, per doz., \$1.50; 4 inch., doz., 1.75; 5 inches, doz.,	2 00

CHOICE SEED POTATOES.

Our customers in the Southern States, and those who desire their Seed Potatoes very early in the spring, will avoid all danger of its being chilled or frosted, by procuring it in the fall, before cold weather sets in. The following varieties will be ready for delivery in October. At the pound price we prepay postage. At peck, bushel and barrel rates, the purchaser will pay Freight charges.

EXTRA EARLY VARIETIES.

	lb.	peck.	bu.	bbl.		lb.	peck.	bu.	bbl.
Vick's Extra Early, . . .	\$0 75	\$0 75	\$3 00	\$6 00	Boston Market,	\$0 50	\$0 50	\$1 75	\$4 00
Early Ohio,	50	50	1 75	4 00	Early Beauty of Hebron, .	50	50	1 75	4 00
Early Gem,	50	50	1 75	4 00	Chicago Market,	50	50	1 75	4 00.

SECOND EARLY.

White Superior,	50	50	1 75	4 00	White Star,	50	50	1 75	4 00.
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LATE VARIETIES.

Rochester Favorite, . .	50	50	1 75	4 00	Vick's Prize,	50	50	1 75	4 00.
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VICK'S FLORAL GUIDE

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